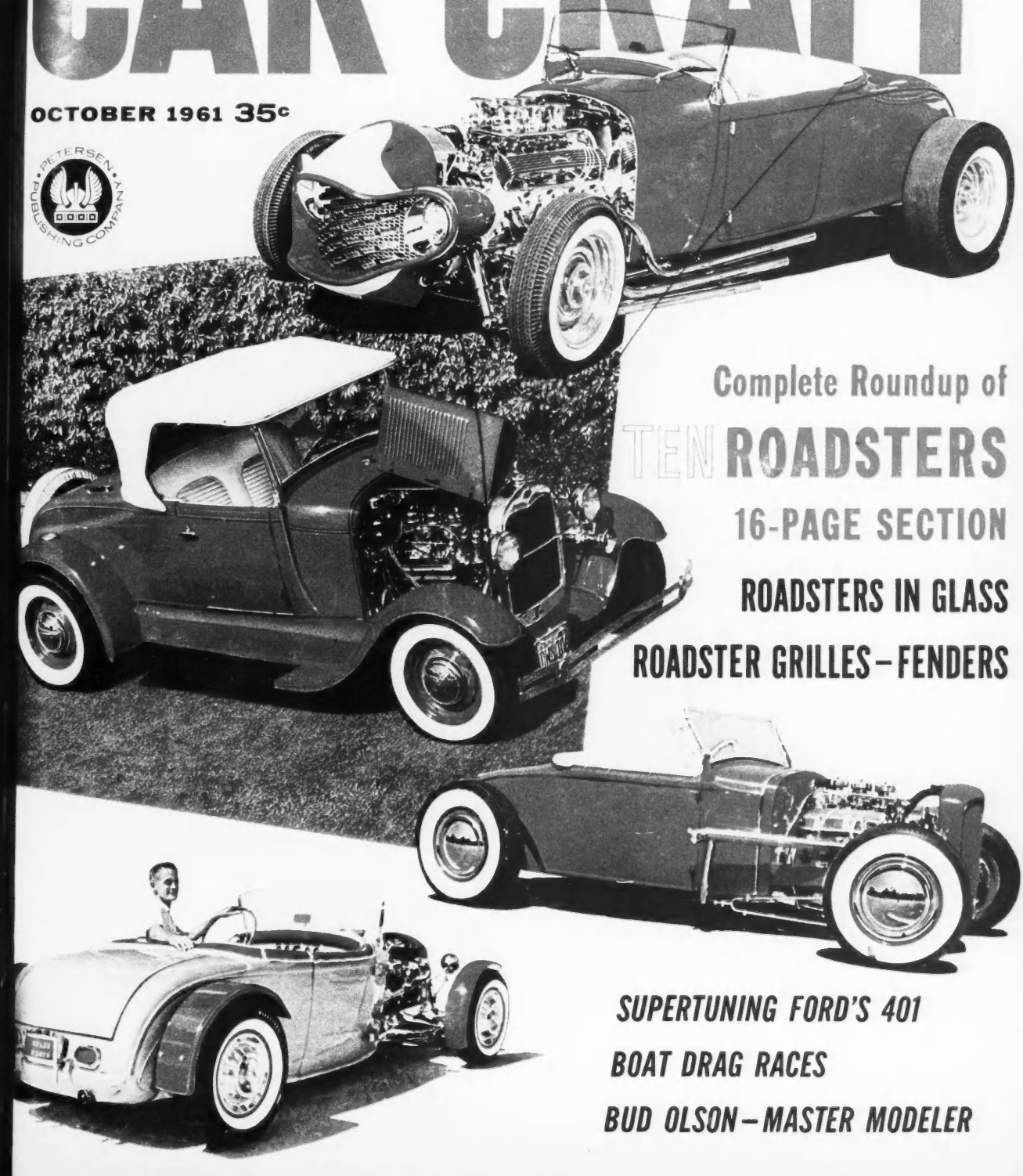
CAR CRAFT

IND

OCTOBER 1961 35c

PETERSEN PUBLISHING COMPANY



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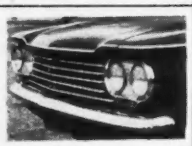

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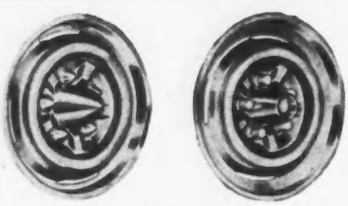

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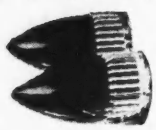

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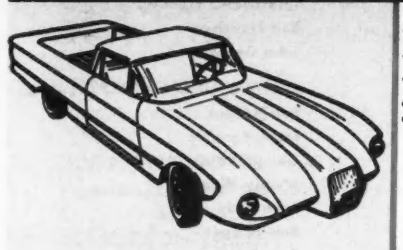
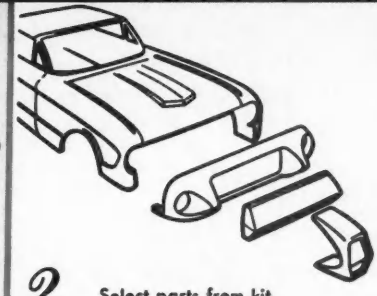
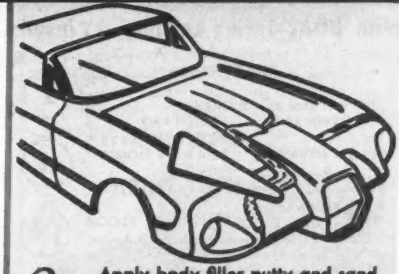


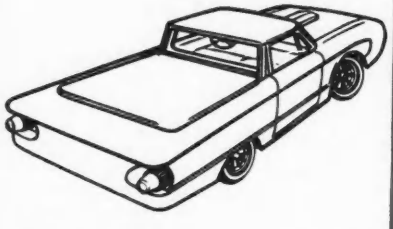
1. Decide style you want. This example uses Falcon Ranchero.



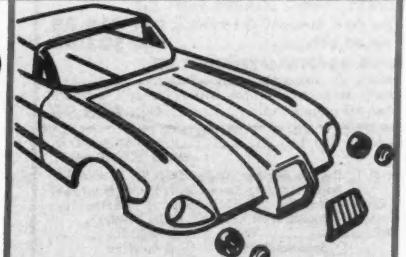
2. Select parts from kit.



3. Apply body filler putty and sand the surface in preparation for painting.



4. Or build up new contours with AMT body filler putty and plastic sheet, (no kit parts necessary).



5. Shown are the front-end pieces to install after the body work is completed and the car has been painted.

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Number 6

features

departments

cover

Red is for roadsters, as our camera catches four of our feature cars, they are owned by Chuck Kirkorian, Jack Page, Tom Madruga, and our own Bill Neumann. Photos by Barris, Hardee, Starbird, Neumann.

CC shops

MICRO IDLE ADJUSTER

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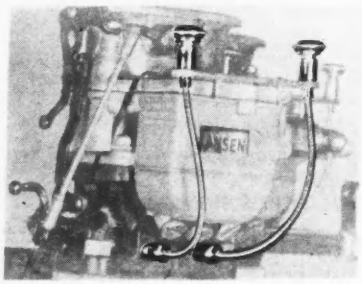

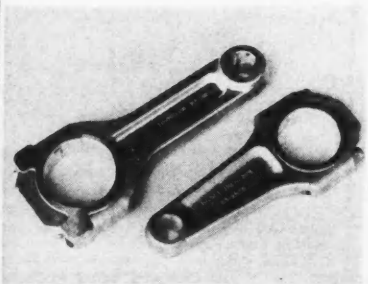

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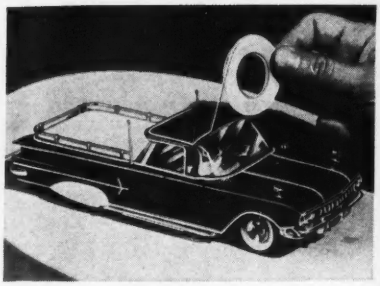

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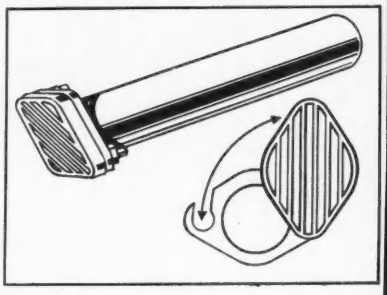

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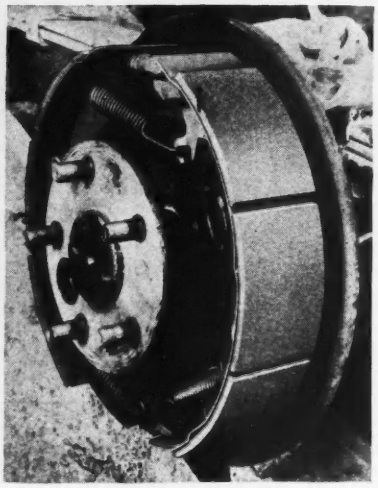

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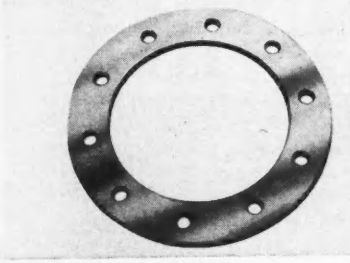

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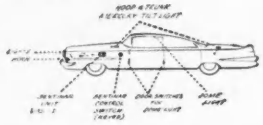
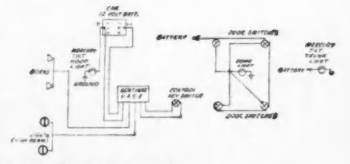
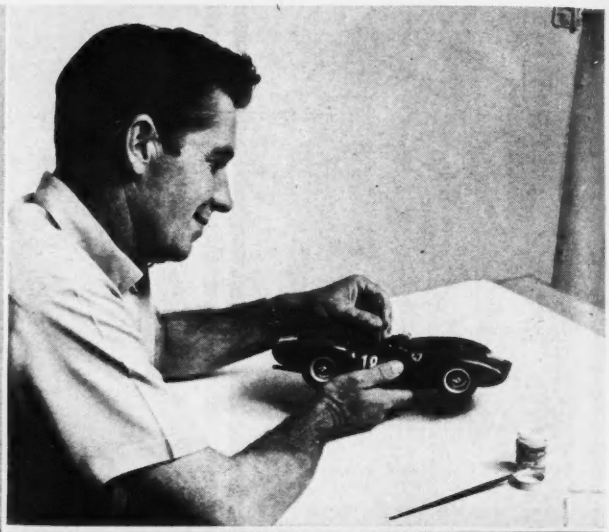




PROTECTIVE ALARM

Protection against vandalism or burglary is afforded by the compact Sentinar Alarm. The tampering with doors, trunk or hood will set off alarm, as well as jacking or towing the car. Battery drain is nil, current draws only when alarm is on. Price $28.95 from Sentron Inc., Dept. U, 119 Dover St., Somerville 44, Mass.



SPEAKING of the editor

AS MORE AND MORE automotive enthusiasts rapidly discover the enjoyment of present day model car building, we've become involved in this tremendous hobby right up to our eyebrows. As we've delved deeper into the subject here at the store, with photos and letters piled high on our desk, we find that it's a real charge to check out refined rod and custom models that have all the trimmings and details in the right places. There's no doubt that the miniature duplicates of our favorite form of transportation have really caught on over the past months, and that we've only broken the seal on a new and avid hobby. Most of the excitement concerns over-the-counter model kits, in which the creative and alert designers have left little to be desired in the way of authenticity. From the first clay models to the very expensive production dies, the model manufacturer and his staff of highly skilled craftsmen and technicians have brought forth tiny automotive replicas that are easy to assemble and a heckuva lot of fun to detail out and customize. The real challenge of these little beauties is in the art of swapping components from one car to another—engines, tops, fenders, wheels, etc. At least, that's what we consireded a pretty good test of ability, ingenuity and tweezer technique, 'till we were paid a visit recently by a gentleman whom we must consider one of the most talented and creative modelbuilders in the country. That's him, hard at work in the photo above — his name is Bud Olson. He's no newcomer to the field of model building, nor are his painstakingly-finished reproductions. He's a pro in every sense of the word, with several of his products on display in automotive museums across the country, and he'd be happy to duplicate your favorite car for you, using his delicate craftsmanship to create a Lilliputian likeness that will be a thing of beauty and a joy forever—for a price, and a healthy one, at that. But the dollar value of one of Bud's miniatures is beside the point — their value is not one that can be preceded with a dollar sign. And the most fantastic thing is that Bud makes "something from nothing." The initial form of his little machines is much closer to a pile of junk than to, say, a Granturismo Ferrari or an Indy roadster. Yes, we think that Bud's a master balsawood magician — and to prove the point check out page 63 for a full report on many of his construction secrets.

Starting with the November issue of CAR CRAFT, we'll have a new look on our cover and in our pages, as our companion magazine, KART, combines with us under one cover. Through this unification, we feel that we'll be able to reach a far greater group of car and kart enthusiasts, and *would-be* enthusiasts, than if the two magazines were to be restricted to the type of publication that is published solely for those people already in the sport or activity. Not being limited to a one-interest group in its new form, CAR CRAFT and KART can stimulate additional outside interest in its two subjects, and thus add new faces to the already tremendous groups of enthusiasts in the two activities. With this consolidation, CC & K will reach a total of a quarter of a million readers, and you'll be getting two for the price of one!

— Dick Day

CORRESPONDENCE

I DON'T BELIEVE IT!

Dear Sir:

In the June issue of your fine magazine on page 46-47 you said that "Carl Casper's Chevy is a '56. I can not believe this could be so. It looks to be an older model. Is it really a '56 Chev or isn't it? You have a very good and helpful mag.

— Gary Spitznass
Bloomington, Ill.

You're perfectly right. Carl Casper's Chevy is actually a '53. Although being reworked so much it's kind of hard to tell that too. — Ed.

I'M WITH YOU

Dear Sir:

Tonight I picked up my July '61 issue of Car Craft. When I read it I was shocked at the nerve of that jerk by the name of Joe Gnautz from Brooklyn, N.Y. If he is just buying Car Craft Magazine for a big laugh and is not interested in the features and pictures it just shows then he is not very interested in cars. Either that, or he is just jealous because he doesn't have a custom of his own.

What right does this man have to say another person should visit a psychiatrist? Any person writing a letter to a magazine has a perfect right to criticize the item being written about, but he does not have a right to insult the person responsible for the item. This just shows his ignorance.

People like this guy should just be ignored if possible. I wish this man would write a letter explaining what was so funny about John Buchan's '56 Chevy and Bob Sanchez's '54 Ford pick-up. If he is such a car expert I would like to see some ideas he has for cars, if he has any.

Regarding Pininfarina, he doesn't customize cars he designs them for speed, comfort and economy. The fins, if this man knew anything about customizing, is a very popular practice and so is the chrome and wild paint jobs. After all the "Outlaw" and the "Beatnik Bandit" are two of the most popular customs in the nation and they both have wild paint jobs.

As far as I am concerned Joe Gnautz is the only idiot of the three persons named in this letter. I agree with you on the comment you put after this man's letter. I buy your mag every month and think it is one of the best out. Keep up the good work.

— Mike Catton
Chatham, Ontario

You're right Mike. I think Joe just doesn't realize the basic rules, and that is, not everybody can come up with the best rod or custom in the U.S. But that we all should give credit to the guy that tries. — Ed.

TUSCALOOSA "88"

Dear Sir:

Here is a picture of my '59 Oldsmobile. My name is Dodson Latham, and I live in Tuscaloosa, Alabama. Most people who like to do

custom work would prefer a Ford or Chevy. As for me I have always liked Oldsmobiles. This '59 hardtop of mine is black and white with a red interior, done in Naugahyde. You don't see many of these cars fixed up nor have I seen any in the leading magazines. I rate your magazine tops, and that is why I thought you would like this photo.

— Dodson Latham
Tuscaloosa, Ala.

The reason you don't see too many Old's, Caddy's or Lincolns, etc. customized, is that it's a high price tag to start a custom with. — Ed.

A YOUNG READER SPEAKS

Dear Sir:

In regards to Joe Gnautz's letter in the July '61 issue of Car Craft Magazine, I would like to say that I think he is entirely wrong. Your Mag is the balanced mag on the news stand. It has just the right amount of customs, dragsters, rods and I especially like the new series on model cars. I might add that I am 11 years old and a model car fan all the way.

— John Bernay Jr.
Waco, Texas

Glad you like the model car section, even I got the building bug. — Ed.

KUSTOM KINGS

Dear Sir:

We of the *Kustom Kings* have recently organized a model car club. At present there are 15 members ranging in age from 13 to 20.

The enclosed photo was taken just after the club was organized. There are about 50 cars in the picture ranging in type from stock late model to home built dragsters. Many of these creations are patterned after cars

that can be seen in and around Nashville and Old Hickory. There are also two drag strips within a 20 mile radius of Nashville which also helps in the building of models. I personally think it would be profitable for your magazine to investigate Nashville as a possible source of photo material.

At the present we are in the process of gathering model cars for a show to be held on August 17. There are about 35 or 40 cars displayed in the window of a local department store. There has been four trophies, four blue ribbons, four car kits and several bottles of paint and tubes of glue donated by the department store manager and the local salesman for the A.M.T. Corp. By the time of the judging on August 17 we hope and feel sure that there will be many more cars entered. We would appreciate it very much if this photo could be printed in your fine magazine.

— James C. Ford, cor. sec.
Old Hickory, Tennessee

NORTHGATE QUARTER MIDGET'S

Dear Sir:

This is a photo of the opening day race of the Northgate Quarter Midget Club held, April 22nd. With the help of the Thunderbird Drum and Bugle Corps and 28 drivers and cars, the

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Write to CAR CRAFT MAGAZINE, 5959 Hollywood Blvd., Los Angeles 28, Calif.

CORRESPONDENCE

continued

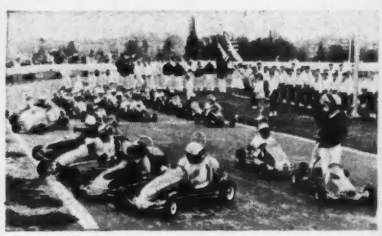
opening was a success even though the weather was poor. The Northgate Quarter Midget track is located at the Northgate Shopping Center, the largest shopping center in Seattle.

The pit area is located at the rear. The track is asphalt and is open to spectators free of charge.

We run with three divisions, Novice, age 4 through 7, Junior, age 8

through 11, and Modified, age 12 through 15. This is our fifth season of racing and we feel proud of our safety record with no serious accidents during this time.

We have tried a new experiment this year with rubber tires in place of hay bales. Hay bales, in our damp climate, do not hold up well and there is nothing harder than a wet hay bale. After much experimenting, we have found that tires stacked three high and bound together in

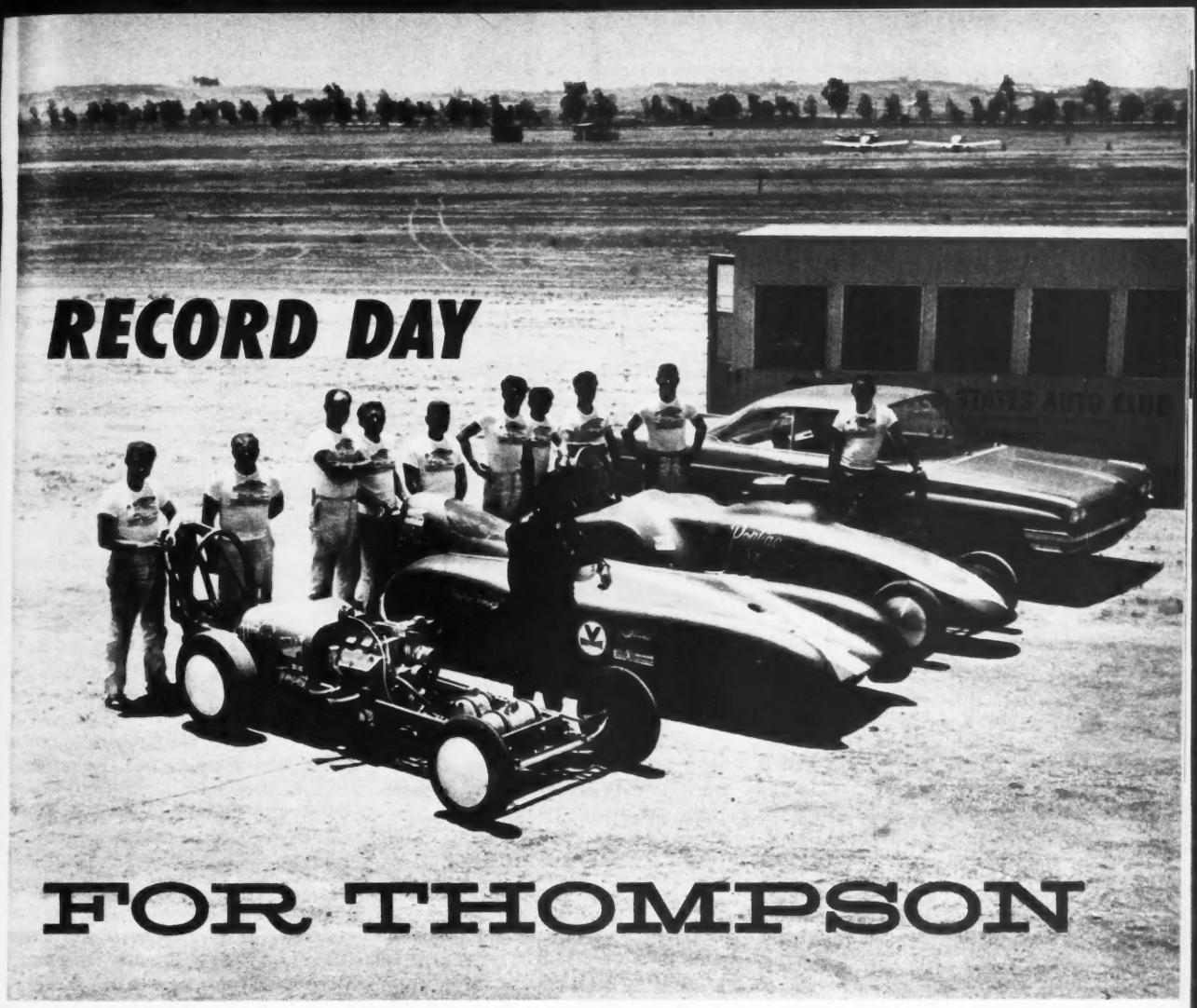


bundles of twelve to fifteen, make a very good back stop. The stack has enough give, and the whole bundle will move, bringing the car to a slow stop. To date, we have not even had a bad bent front end and no one hurt.

The following are officials of the club.

G. B. DONALDSON, President
R. H. ROWE, Vice President
LEN STITH, Sec. Treasurer
P. R. TILDEN, Chairman

— J. D. Heslip
Seattle, Wash.



RECORD DAY FOR THOMPSON

Seven hour assault by Mickey Thompson, America's number one hot rodder, captures new National and International records for the standing kilometer and mile with four cars and five engines

BY BILL NEUMANN

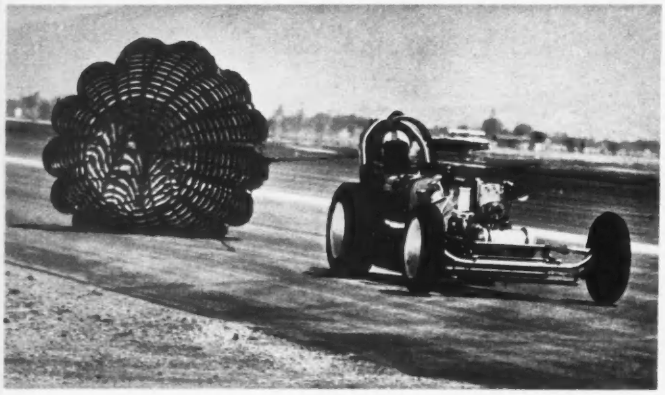
AT FIVE O'CLOCK in the morning when most people are still sound asleep, Mickey Thompson and his crew of speed mechanics were already busily making last minute checks to cars and engines prior to speed runs that could add 18 International and American National records to the 28 he now holds. On Sunday, July 9th at March Air Force Base in Riverside, California, the United States Auto Club, the official timers for International and National records in the U. S., were set for the first runs at the standing kilometer and mile record attempts. March's runways are 2¼ miles long, which provides ample shut-down area, as speeds attained at the end of the mile runs were to be in the 250 mph bracket. The records are figured on an average basis as the cars are started from a stand still with timing lights at the start and finish lines.

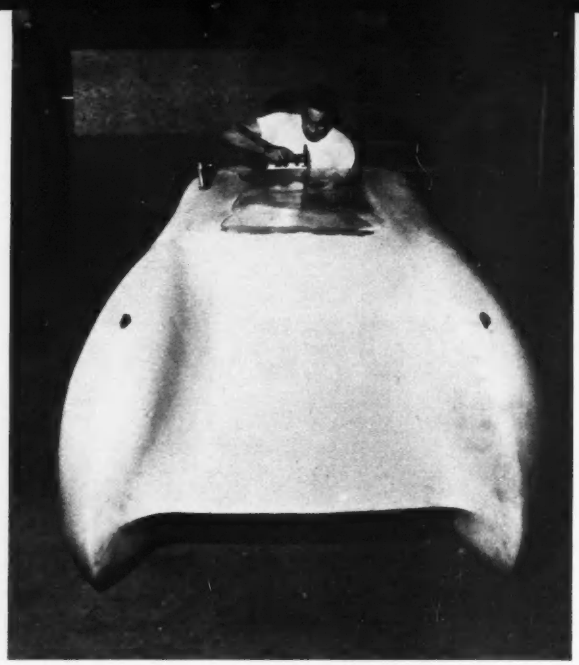
Mickey, who is America's number one hot rodder, prepared four cars and five engines for record attempts in Class C; 3000-5000cc, Class D; 2000-3000cc, Class E; 1500-2000cc, Class F; 1100-1500cc and American National Stock Car Class B; 305-488 cu. in. The existing records are held by five different countries and the U. S. Some of them have been on the record books as far back as 1930. Also today's attempts will be the most ambitious speed record tries by an individual in the history of record-setting. No one has ever driven this many cars in this many classes in one day. And despite his growing list of International and American National Speed records, he remains a hot rodder much the same as thousands of other young men in this country who enthusiastically build, drive and race their own creations. There is, however, one important difference. Thompson has carved a full time career from

(continued on following page)

RECORD DAY

Below. Drag chute is used to slow speed of two cylinder Tempest dragster, as the records fell in the International Class F mile and kilometer. Note cut-down tires to reduce high speed friction. Right. A special body was built by Frank Kurtis to fit over standard dragster frame for streamlining.



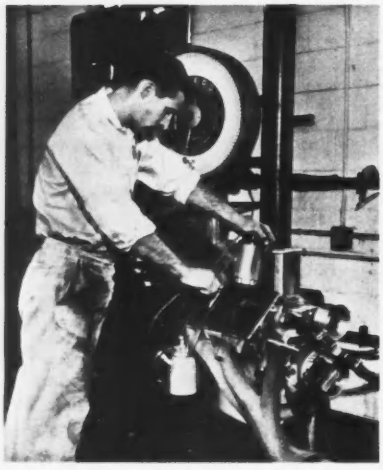


hot rodding. His experience in designing and building record-setting cars has enabled him to create a booming speed equipment manufacturing business known as Mickey Thompson Enterprises in Long Beach, California.

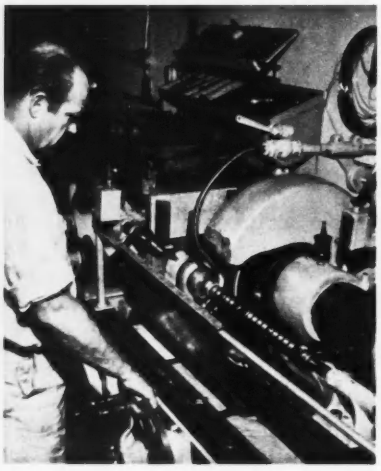
Mickey's pit crew was one of the best group of mechanics I've seen in action. Each man had a specific job to do and things went off like clockwork, as oil, plugs, and water were changed after each run and fuel added. When minor emergencies arose the crew really turned on to take care of the trouble. Jim Deist from Deist Drag Chutes was on hand to personally repack the chutes after each run. As was the Champion Spark Plug representative to check on the plug changes.

The first run was made at 6:15 in the open dragster frame car powered by a two cylinder Pontiac Tempest engine. The regular four cylinder Tempest engine was cut in two, with the two rear cylinders being used. This car was running Class F 1100-1500cc, so the engine's stock bore of 4 1/16" and stroke of 3½", which was destroked ¼" from 3¾" standard crank size, gave a total of 90 cubic inches. Thompson's own cam, aluminum rods, and pistons were used along with a 2:71 GMC blower putting out a 20 psi boost. Horsepower was said to be 257 at 7000 rpm on special nitromethane racing fuel. A LaSalle three speed box was used with a 3.3:1 rear end ratio. The little two banger really came on and Thompson tucked away four of the records he was after by turning the kilo at 91:369 and the mile at 106:78. Both were two miles per hour faster than the previous records.

Next car to the line was the fully streamlined body on a Dragmaster chassis. This car was to run both Class D and E with an engine swap to be made after the Class E runs. The E Class is 1500-2000cc so the four cylinder Pontiac Tempest mill was sleeved down and destroked to

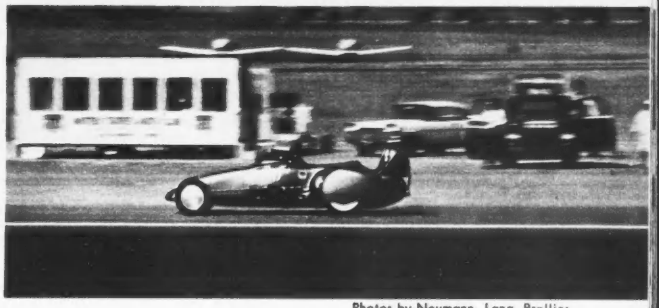


Dick Harryman, Mickey Thompson Enterprises readies two banger for dyno run. Standard Tempest four was cut in two and destroked ¼ in. to 90 cu. in.

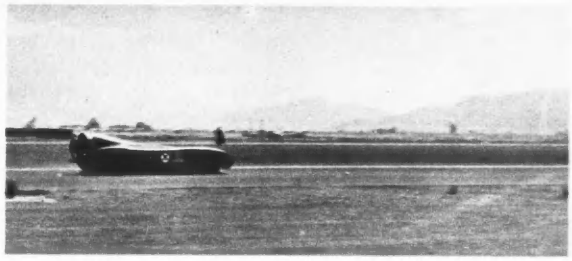


Thompson's own cams are turned out by Johnny Rice on grinder. Other Thompson speed equipment includes, pistons, rods, manifolds, and supercharger kits.

Darrel Droke, one of Mickey's top mechanics puts finishing touches on stock Pontiac Catalina. This is the car that Hayden Proffitt drives at drags.



Photos by Neumann, Lang, Brollier



Above. Thompson flashes by the mile marker at better than 150 mph to average 95.57 mph for a new National record in Class "B" Stock Car. Official timing was capably done by the United States Auto Club. Above right. "Assault 1" takes its turn through the traps breaking the kilo record previously held by Ed Cortopassi in the famous Glass Slipper dragster by 7 mph. The mile record was smashed by 13 mph which was held by Bernd Rosemeyer in an Auto Union. Right. The "Attempt" was run in both Class D and E with an engine swap after the E Class runs, which saw the records fall. The D Class was not finished due to high winds.

120 cu. in. The bore and stroke was 3 9/16" x 3" and ran a 3:71 GMC charger with a 20 psi boost. Horsepower was approximately 420 at 7400 rpm on fuel. The Class D engine which is 180 cu. in. with a bore of 4 1/16" and destroked ¼" to 3½" will run in the 2000-3000cc class. This engine is also supercharged by a 4:71 GMC blower putting out 22 psi boost. The approximate horsepower was 460 at 7000 rpm. This car also uses the LaSalle three speed transmission and a rear end ratio of 2.96:1. The E Class engine was the first to be run and really stormed down the strip to post four more new records by turning the kilo in 96.368 mph breaking that record by 7 mph and the mile with a speed of 114.349 shattering the old mark by 20 mph. The car was then returned to the pits for the engine change by Mickey's crew.

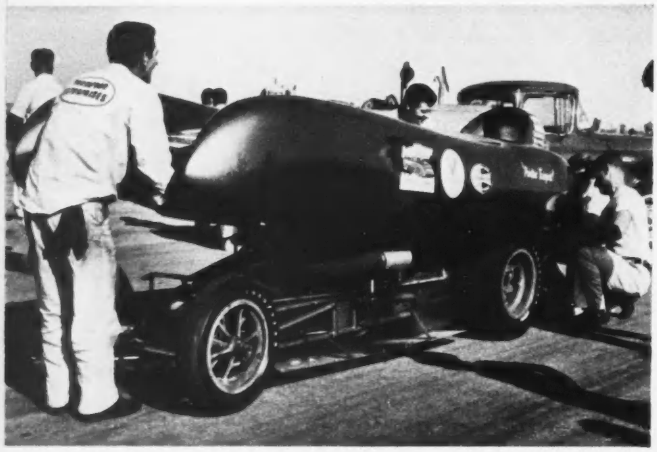
While the engine was being changed, the famous "Assault" was brought to the line. This car is also a streamlined body on a Dragmaster chassis and running a '57 Pontiac V8 engine with 303 cu. in. This runs International Class C 3000-5000cc, with a bore and stroke of 3 5/16" x 3". This is a .030 overbore and destroked ¼ inch. A 6:71 GMC blower was used with an 18 psi boost and produced a horsepower of 690 at 7200 rpm on fuel. This and the other Tempest engines were equipped with Thompson's own manufactured speed equipment. The car was also equipped with a B&M Hydro four speed transmission and a 2.70:1 rear end ratio. Being hydro equipped the engine was started with batteries and cranked off with a loud roar. The flag was dropped and Mickey blasted off leaving two black tire marks as far as I could see. When the two way runs were over four more records fell by the wayside. The kilo speed was 123.902, seven miles over the old mark, and the mile was 138.926, thirteen miles per hour faster than the previous record. These speeds do not

(continued on following page)

Above. Thompson (left), Jack Hart, N.H.R.A. Tech Advisor hash over the last run. Shade was where you could find it and was at a premium in 110 degree heat. Left. Mickey's fine crew never faltered, as oil, water and plugs were being changed after each one way run of two required for Official records. The return run must be made in one hour's time.

RECORD DAY

Right. With canopy in place, push start on Class D and E streamliner sending Thompson off on another record breaking run. Record for the kilometer was held by R. Mays of England and Lichtenstein of France in a Bugatti for the mile, which have been on record books for some time. Breaking International record in U. S. also captures National mark.



Streamlined body made in one piece for easy removal and servicing. Body is mounted on standard Dragmaster frame fitted with full belly pan. All tires were Goodyear Sports Car Specials on the front with Blue Drag Dragon slicks in back.

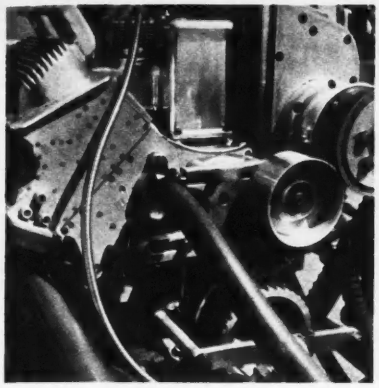
Right. Joe Petrali, West Coast Zone Supervisor for United States Auto Club confirms new records for Thompson. Joe is an old hand at racing, having set many speed records himself aboard Harley-Davidson motorcycles prior to WW II.

Jim Deist personally packed his famous drag chutes after each run, and here is assisted by Mickey's wife Judy, who was a real asset to crew. Pick-up carried all necessary oil, water and fuel.

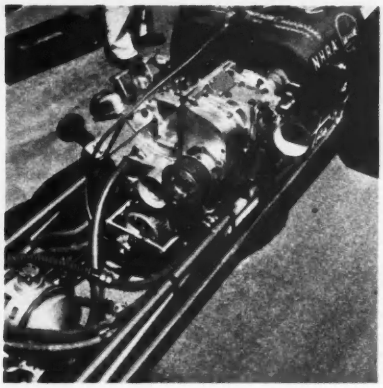
Streamlined body covering dragster allowed tire smoke, dust, fumes to be trapped in cockpit. Problem was solved by use of oxygen and mask. Cockpit was tight squeeze for Mickey's size.

sound as fast as the drag times, but remember they are average speeds. On this run Mickey was doing over 250 mph at the end of the mile marker. As the morning wore on, the terrific heat of the desert made it difficult to cool the fuel and increasing wind velocity made high speed driving very tricky.

The next car ready to run was the '61 Pontiac Catalina tudor sedan, which was competing for National Stock Car Class B record. (There is no International class in this category). This is a strictly stock car, as class regulations state that all parts must be cataloged by the factory and made available to the public. The car was equipped with heavy duty suspension needed for high speed runs and a four speed manual trans. Rear end ratio was 3.08:1. The engine was 389 cu. in. and ran pump

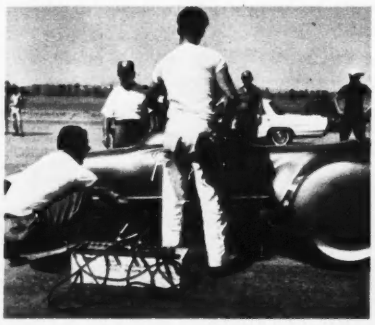


Two rear cylinders of Tempest block were used for two banger mill. ¼ inch aluminum plate used to cover block.



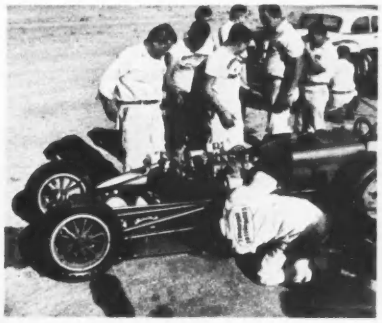
Many Allen cap screws used to prevent expansion leaks. Blower is a G. M. C. 2:71 with a single Hilborn injector.

120 cu. in. Class E Tempest is swapped for 180 cu. in. Class D four banger. March AFB was perfect spot for runs.



"Assault 1" was B&M Hydro equipped, made push starts impractical. Engine was started with two 12 volt batteries then disconnected. This was the most ambitious speed record tries by an individual in history of record-setting.

While Thompson changed plugs, Hayden Proffitt refills water to cool engine, while other crew member checks fuel. '57 Pontiac block displaces 303 cu. in.



Champion Spark Plug representative was on hand to check plug heat range during changes between runs. Each car and engine performed flawlessly on every run which is a credit to Thompson and his great crew of speed mechanics.

gas. Two fast runs were made with Mickey leaving rubber all the way through third gear, which netted two more records at 81.39 mph for the kilo and 95.57 for the mile, which bettered the old marks by eight and eleven miles per hour respectively. Thompson said later that he had "wound the speedometer needle off the dial and was taching through the mile at about 150 mph."

At about one o'clock the engine change was completed in the streamliner to run Class D, and was on the line ready to go. A beautiful start was made, but Mickey shut down about half way through the traps. The wind had increased steadily during the morning, until it was gusting to 25 mph directly across the runway, which made handling at high speed very hazardous. The car was towed back to the starting line, where everyone waited for the wind to die down, but it didn't, so Mickey called it a day after capturing six International and eight National speed records. The old and new records are as follows:

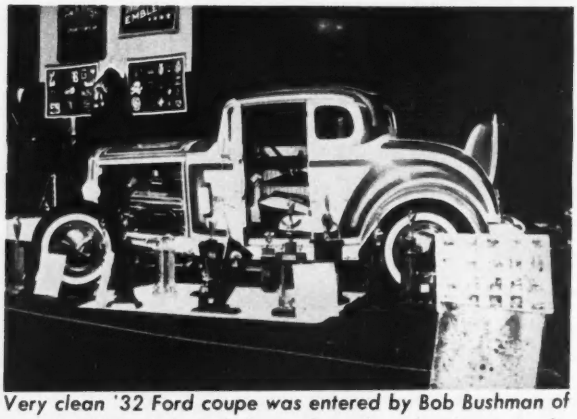
			NEW RECORD
CLASS C: 3000-5000cc			
1 k. E. Cortopassi	Glass Slipper – USA	116.43	123.902
1 m. B. Rosemeyer	Auto Union – Germany	125.3	138.926
1 k.		National	123.902
1 m.		National	138.926
CLASS D; 2000-3000cc			
1 k. R. Caracciola	Mercedes Benz – Germany	110.2	cancelled
1 m. R. Carauciola	Mercedes Benz – Germany	127.1	cancelled
CLASS E; 1500-2000cc			
1 k. R. Mays	E. R. A. – England	89.73	96.368
1 m. Liechtenstein	Bugatti – France	94.01	114.349
1 k.		National	96.368
		National	114.349
CLASS F; 1100-1500cc			
1 k. Furmanick	Maserati – Italy	89.73	91.369
1 m. Furmanick	Maserati – Italy	104.9	106.78
1 k.		National	91.369
1 m.		National	106.78
AMERICAN NATIONAL STOCK CAR CLASS B; 305-488 cu. in.			
1 k. C. Daigh	'57 Ford	73.15	81.39
1 m. C. Daigh	'57 Ford	84.02	95.57

SHOWTIME

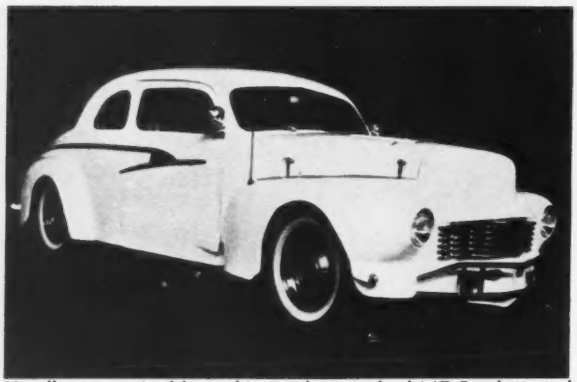
EASTERN SHOWMANSHIP DRAWS FULL HOUSE TO CLUTCH ARTISTS ROD AND CUSTOM SHOW

BUFFALO, NEW YORK

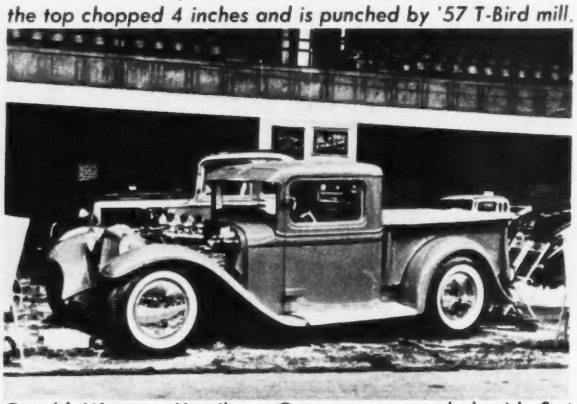
Photos by BOB HEGGE



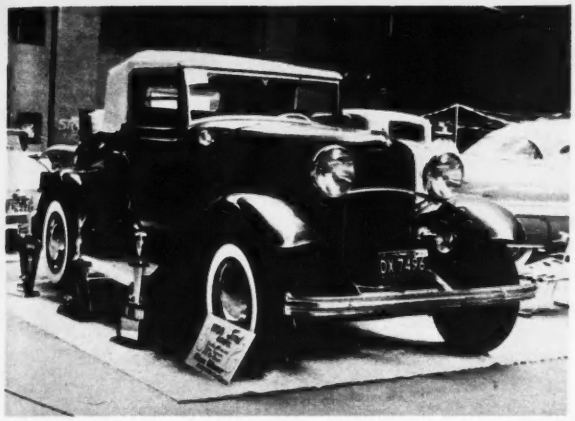
Very clean '32 Ford coupe was entered by Bob Bushman of Detroit, Mich. Bob took home first place hardware in the altered street coupe class. Much scalloped deuce has had the top chopped 4 inches and is punched by '57 T-Bird mill.



Hardly recognizable is this much reworked '47 Ford owned by Bill Fromme, Olean, N.Y. Front end has been given a complete restyling with molded fenders. Chopped top and channeled body. Wide lug chrome wheels, Chev mill is run.



Gerald Watson, Hamilton, Ont., was rewarded with first place in the pre-war custom pick-up class for his immaculate '32 Ford. Rod features a full fendered channel and a 2½ inch top chop. Mill is modified 354 cu. in. Chrysler.

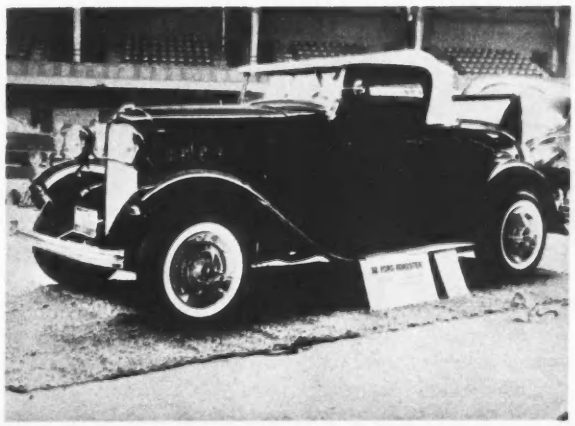


Very rare '32 Ford convertible is owned and rebuilt by Frank Robins, Detroit, Mich. Meticulous workmanship is much in evidence throughout car, which is painted a deep blue and powered by '56 Chev V8. Frank won second in class.

USA

Top right. Carl Casper's chopped '53 Chev hardtop cleaned up the hardware, winning best interior, first in class, best display. Custom features contour swivel seats, chrome mill.

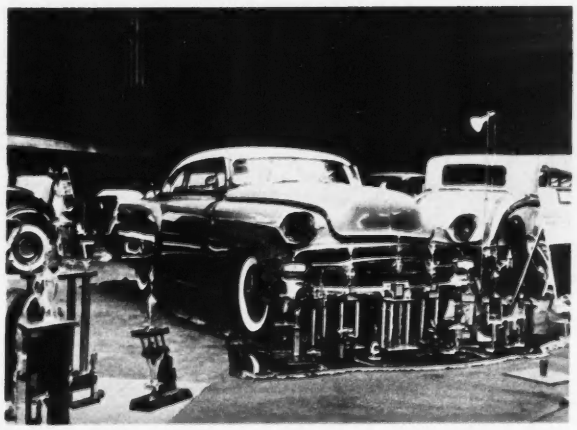
Right. Sy Gregorich from Detroit, Mich. walked away with top honors in the feature award class for his beautiful '56 Ford Crown Vic. Features front end, molded lakes pipes.

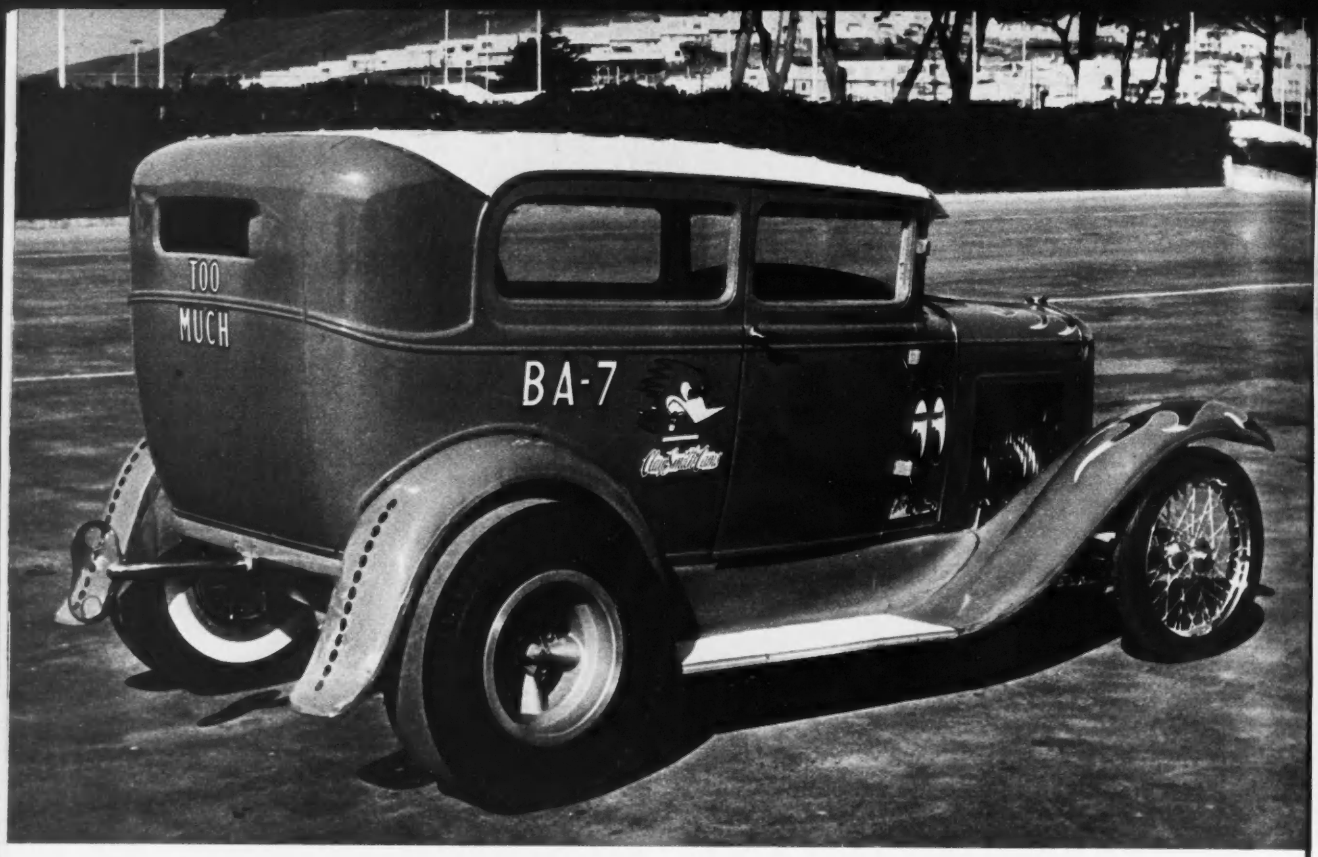


Right. First place street roadster went to Lewis Wolff of Lincoln Park, Mich. Beautiful black '32 Ford is a stand-out with its red and white Naugahyde interior. Top is chopped.

Bottom right. Neat '32 Ford coupe was built and entered by Dick and Jack Catrabone of Erie, Pa. Coupe took third in class and is chopped and channeled. Air cleaner is Mercury.

Bottom. Best engine compartment and second place custom went to Serge Revillard of Buffalo. '54 Chevy features a chopped top, rounded hood corners, Pontiac center grille.



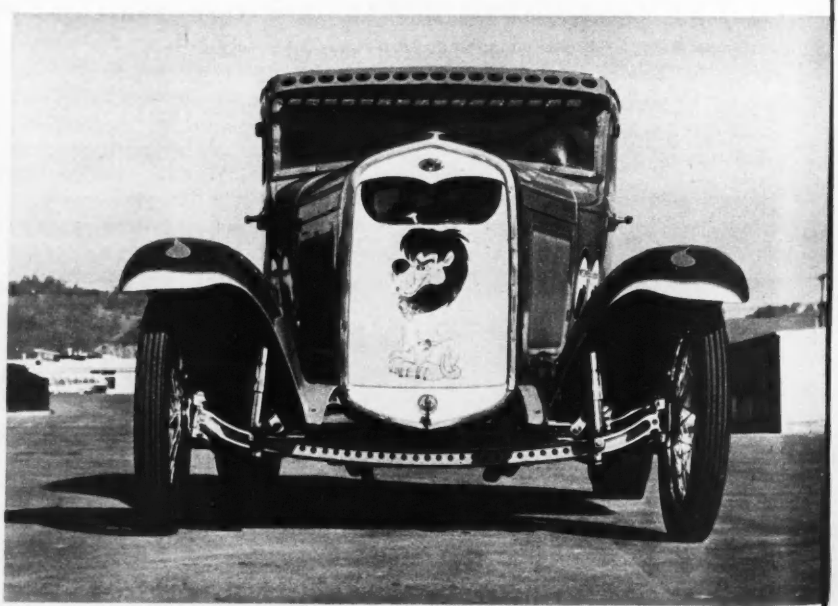


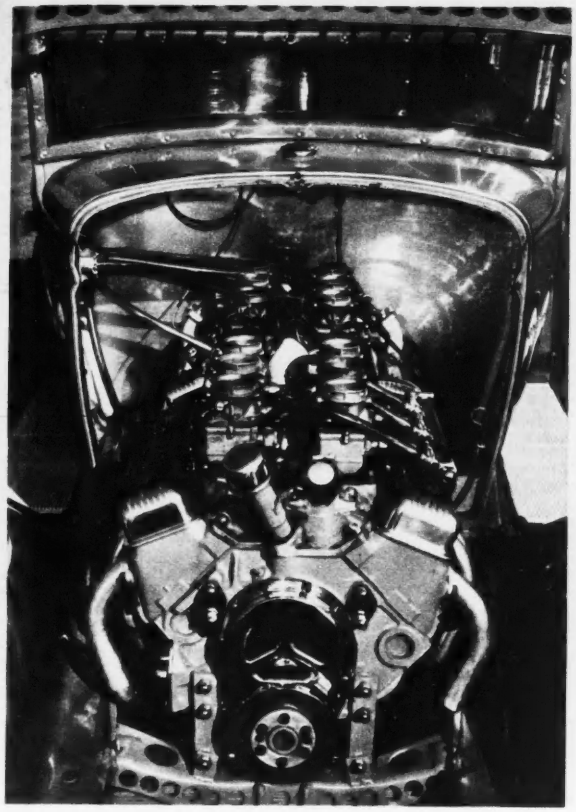
A DRAGSTER IN DISGUISE

From far-outsville Ray Callejo's twin Chevy punched "A" sedan is—TOO MUCH

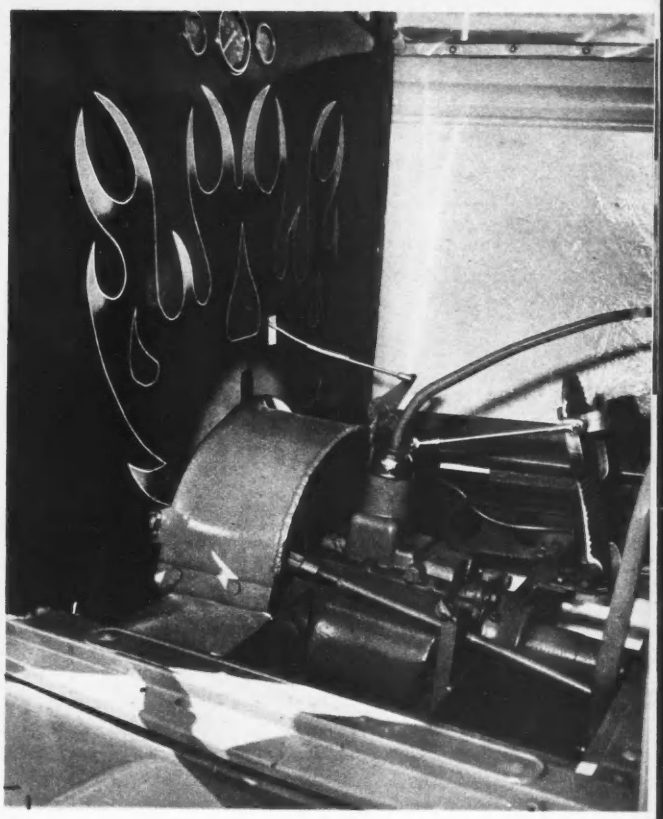
Wild little '31 Ford tudor sedan is very innocent looking with the hood on as the twin engines cannot be seen, only heard. Car is stock height except top is chopped 5 inches. Work was done by Ray who hails from San Francisco, Calif. Note windup key push bar in the rear.

Stock grille shell is covered with aluminum which sports lion painting. '34 Ford axle and spindles are used up front with Speed Sport spoke wheels running Goodyear Super-Eagle 3:50 x 19 tires. To-date Ray has invested $1800. in altered sedan and two mills.





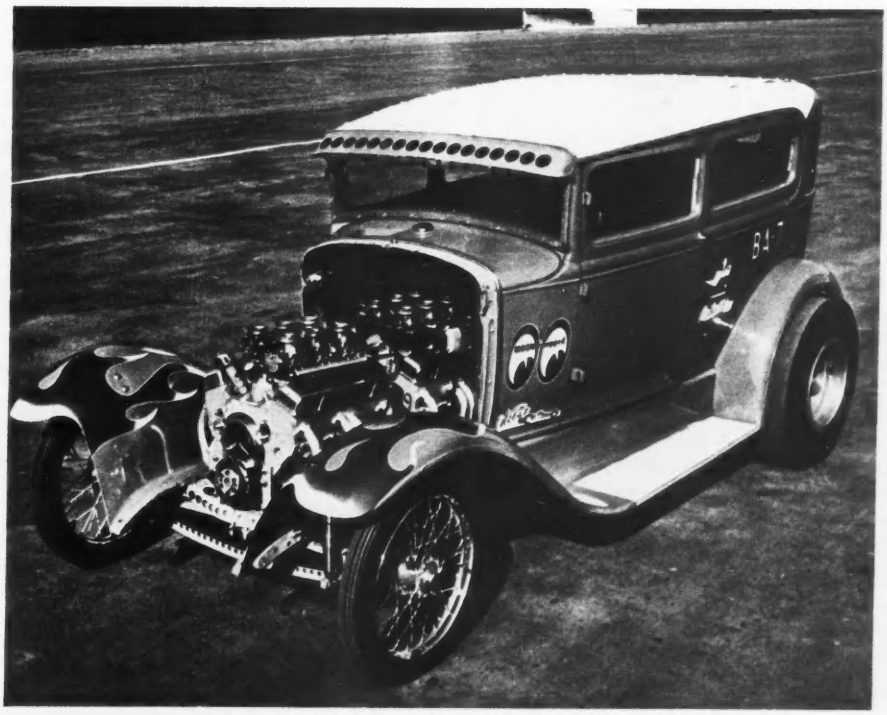
With hood section removed twin 292 cu. in Chevy engines are seen, although with view it looks like one long mill. Both engines run Clay Smith cams, Jahns pistons, Offy manifolds.



Business like interior shows set back firewall with necessary gauges and scatter shield. Transmission is '39 Ford running second and high gears only. Note neat accelerator linkage.

Photos by Dave Cunningham

Rear end runs '48 Ford solidly mounted to frame with 4:11 gear ratio. Wheels are American Racing Mags with Bruce Slicks. Car is painted blue and white with wild flame stripping. Ray held several 1320 strip records on west coast when car was running a single engine but to-date we do not have any speed times with the twin engine set-up. His best time to-date with one engine, 124 mph.



FORD 401

Supertuning Ford's Mightiest V8 For top performance—A new Challenger for the Big Super Stocks

BY JOHN GERAGHTY

THE HOTTEST STOCKER in 1961 could easily be a conclusive title to the supertuned factory optional 401 horsepower Ford this year, but undoubtedly would draw numerous letters in protest from irate Pontiac and Chevrolet owners all over the country. However, if this statement was unbiasly balanced between these big three, even the hard to convince would have to come along and agree.

Pontiac's factory engine as purchased from the showroom floor, at its best, produces only a little better than average performance until equipped with the special factory "only" options, special cylinder heads, larger valves, long duration camshafts, and high rpm ignition systems which must be purchased separately after cutting through enough red tape to wrap the complete car in.

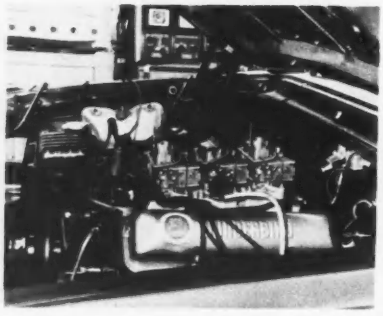
Chevrolet's big 409 cubic inch engine package is a real performer, but was made in small quantity and is hard to get now because of the '62 model changeover. The 348 cubic inch 350 horsepower option is a top performer but just doesn't have the inches to stay up front.

Ford has produced a 390 cubic inch engine of 375 or 401 hp that is available through any dealer in the country and can be purchased by anyone desiring a high performance package. By following the step-by-step tuning modifications recommended in this article, maximum performance can be obtained, thus qualifying these Fords as top stock contenders anywhere. This is our basis for calling it 1961's hottest.

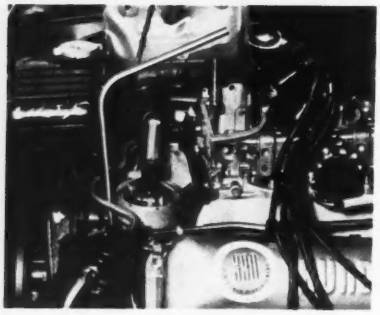
Ford's 390 cubic inches is achieved through a bore of 4.050 inches and a stroke of 3.780 inches. The block in the high performance engines differs in nearly every respect other than inches. The block casting has heavier internal stiffening ribs and a special oiling system with a relief valve at the opposite end of the system from the pump. Meticulous construction and inspection is carried out throughout the entire assembly. As in all Ford products a cast iron crankshaft is used, this is an advantage rather than a disadvantage as many believe. Having a beefy crank, breakage is nil. Being a casting, much less machine work is required by the factory. The cast material forms a much better bearing surface than steel, assuring a longer bearing life. Micro finished steel-backed copper/lead babbitted bearings are used at a stock recommended clearance of .001-.0031, which should be increased .001 over maximum for continuous high rpm use. A special high rpm vibration dampener is used to reduce crankshaft deflection during rapid acceleration and variable road conditions.

The camshaft timing has remained the same as in 1960, producing a .496 inch lift with 307 degrees duration allowing 6500 rpm to be obtained without valve float or loss of low end performance. Adjustable rockers are used with an improved version of the '60 valve springs equipped with heavy duty retainers.

There are two manifolds and carburetion systems available with these engines. The 375 has an aluminum four-barrel manifold approximately 40 pounds lighter than the cast iron unit, clean, smooth ports and a large four-barrel carburetor. The 401 is equipped with an optional aluminum three carburetor aluminum manifold which may be purchased through your neighborhood Ford dealer for $206.71 complete with carburetion, linkage, air cleaner, etc. The linkage is manual progressive type hooked to



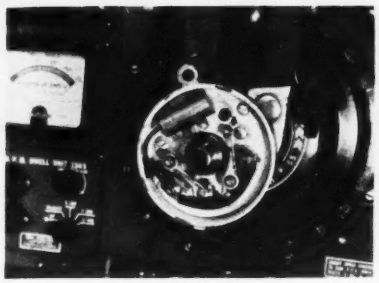
A dynamometer and oscilloscope are hooked up to 401 Ford engine, along with the latest testing equipment to record actual torque and horsepower.



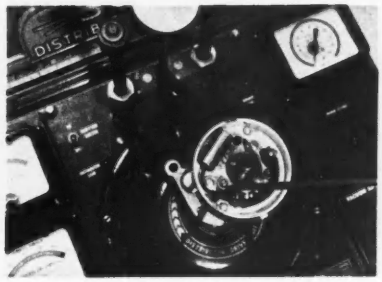
Remove distributor cap and make note of rotor position to assure proper reassembly. Remove hold-down clamp, primary wire, lift distributor up and out.

the center carburetor and staggered to each end carburetor which also open progressively, reducing the tendency to lose manifold vacuum and low end performance.

The factory exhaust system is in most cases adequate but can be improved upon as indicated later in the story. The ignition system is basically a very reliable unit equipped with a stationary dual point plate, all mechanical advance of 13° which, in its stock form, will normally turn 6000 rpm without point bounce or vibration. All these components compounded is adequate material to produce a real performer.



The stock distributor is thoroughly checked on Sun Machine before any modifications to determine wear, and assuring a basis for a high rpm unit.



A small soft piece of rubber is installed behind the point arm to assure high rpm without point bounce or vibration. Install rubber on each set of points.

After checking the distributor condition, the plate retaining screws are removed and plate lifted out of housing revealing mechanical advance plate.

Although we used a dynamometer for these tests no major tune-up equipment will be necessary for the following procedures; however, a neighborhood garage should be kept in mind to check the distributor modifications on their synchronizer.

TEST #1

The first test run on the big Ford was to determine the basic condition of the engine components. A very poor power curve was recorded and it was evident that several things were in need of attention, but in order to progress in a step-by-step procedure only one item was changed in this first test. The most prominent problem being on the secondary side of the ignition system. The factory wiring designed as a resistor and equipped with a carbon center, would not carry the necessary secondary coil voltage to the spark plug at higher engine rpm. After replacing the plug wires with Packard 440 copper center cable and installing a new coil to distributor cap connector, the spark plugs were removed and replaced with the same factory recommended heat range and we were ready for test #2 (most high performance engines are now being equipped with copper center cable).

TEST #2

The increase in hp and rpm was quite pleasing and our attention could now be directed to the carburetion system. The 375/single four-barrel unit was tested first. The air/fuel ratio meter registered 14.5 parts of air to 1 part gasoline under cruise conditions and 13.2 parts of air to 1 part gasoline under maximum load conditions. The desired fuel ratio for maximum horsepower is 12 parts of air to 1 part of gasoline, so it was quite evident that the mixture would have to be richer on the full throttle operation. Considering the 14.5 ratio at cruise to be desirable for fuel mileage the secondary system was richened by drilling the jet .003 oversize.

The TriPower manifold was checked and found to be slightly on the rich side at idle but after readjusting the idle circuits in each of the carburetors a leaner fuel/air ratio was attained.

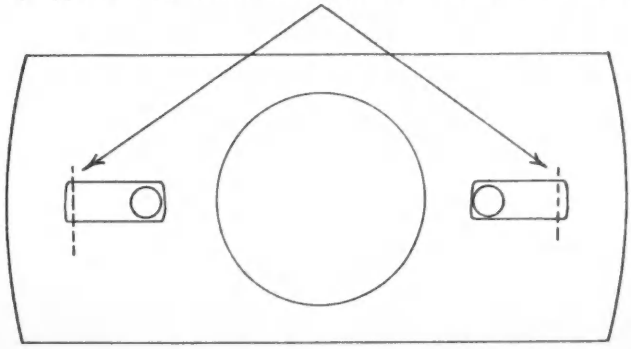
Cruise on the center carburetor was recorded at 13.8 and full throttle operation, under maximum load, produced a 12.4 ratio which is reasonably close. We do not recommend a jet change as only a 5 horsepower increase was shown and the chance of damage to a gasket while increasing the jet size would be disastrous as they are nearly impossible to obtain. The 1⅛-inch venturis of the center carburetor added to the 1 3/16-inch venturis of the two end carburetors produce the added area necessary for the additional horsepower claimed by the factory and is well worth the $206.71 outright purchase price. Factory specifications on the TriPower carbs are as follows:

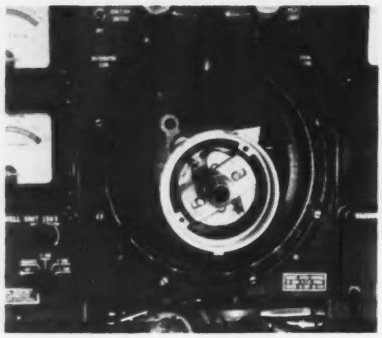
CENTER CARBURETOR
Part #2436

Main Metering Jet Stamp		No. 61
Main Body & Plugs Assembly		
Idle Air Bleed (Air Horn)	.070″	2 Holes
High Speed Bleed	.040″	2 Holes
Main Metering Body & Plugs Assembly		
Idle Feed Restriction	.026″	2 Holes
Main Wall Bleed	.028″	2 Holes
Main Air Bleed	.028″	2 Holes
Idle Needle Seat	.0635″	2 Holes
Angle Channel Bleed	.028″	2 Holes
Pump Capacity		
19 = 23 cc in 10 strokes		

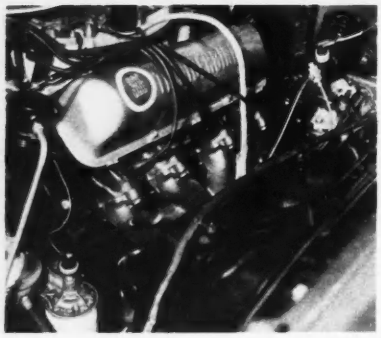
(continued on following page)

Weld up approximately 1/16th of slot ends and file to obtain 10° advance.





The centrifugal advance mechanism's outward movement of weight is guided by pins through slotted holes. When pins reach ends, advance is stopped.



The stock headers are a collector type, well designed, and prove adequate for normal operation. However, increased power was found from custom headers.

Pump Discharge Nozzle .028″ 2 Holes
Fuel Level at 5 lbs. Pressure
Bottom of Sight Plug opening

END CARBURETORS
Part #2437

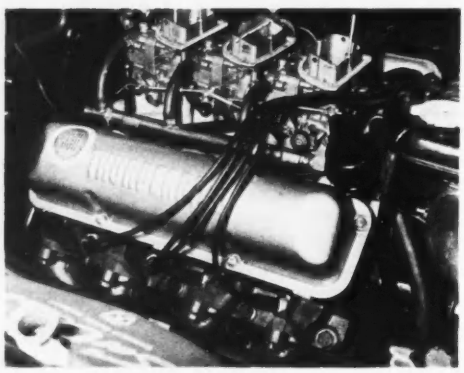
Main Metering Jet Stamp No. 66
Main Body & Plugs Assembly
Idle Air Bleed
(Air Horn) .076″ 2 Holes
High Speed Bleed .0293″ 2 Holes
Main Metering Body & Plugs Assembly
Idle Feed Restriction .029″ 2 Holes
Main Well Bleed .028″ 4 Holes
Main Well Bleed Do Not Drill
Idle Needle Seat .0635″ 2 Holes
Angle Channel Bleed Do Not Drill
Pump Capacity
19 = 23 cc in 10 strokes
Pump Discharge Nozzle .028″ 2 Holes
Fuel Level at 5 lbs. Pressure
Bottom of Sight Plug opening

TEST #3

The fine tuning, or sometimes referred to as supertuning, could now begin. An exact distributor curve could be plotted and installed into the stock distributor. This is accomplished by locking the distributor advance mechanism, so that it is inoperative and, while under maximum load at particular engine speeds throughout the entire power range, the distributor is advanced and retarded until the point is found that produces maximum power and note taken on the amount of advance at each of these engine speeds. This curve is then installed into the distributor by the use of different weights, springs, and stops until this curve is matched.

It was found that by stopping the advance curve at 10 degrees, the curve worked out perfectly (all modifications to the distributor can be found in the distributor modification section adjoining this article).

The 401 Tri-Power is equipped with a flat aluminum air cleaner with a paper element. The element doesn't permit adequate air intake for high speed performance, but is very efficient for normal city operation. The paper element can be removed for drags, but care should be taken when running in dusty areas.



The mechanical linkage is a progressive type operating on the center carburetor until the throttle is depressed. The rear carburetor then opens partially and the front follows shortly after. At full throttle all three carburetors become full open at the same point.

TEST #4

After the ignition modification a great improvement in the major part of the power curve was evident and we then began to trim the fine edges off by recalibrating carburetion and double checking valve settings. A definite advantage was found in exact valve settings. The engine must be allowed to reach a normal operating temperature and continue running while setting clearances. We strongly advise use of the P&G valve gapper for exact clearance as shown in the picture captions. This unit assures exact settings by registering lash through the use of a dial indicator. .027 proved to be the most advantageous setting for intake and exhaust.

After assuring ourselves of the maximum at this point, the exhaust system was our next test.

TEST #5

The mufflers were removed and the stock exhaust manifolds drilled and equipped with pressure and heat gauges to determine flow and restriction. Although the stock system proved to be superior to those of other engines tested there was definitely room for improvement. After formulating a design, special headers were constructed and installed. The increase in power proved to be impressive and the car was now ready for the local drag strip. A 4.29 rear axle ratio was installed with a set of Atlas Butron tires and we were ready for the quarter. Three runs were made: 105.96 – 13.31, 107.18 – 13.24, and 106.84 – 13.34. This was quite

pleasing considering the car owner had never raced before and was a little slow on his shifts. I personally am very glad to see Ford moving up front again. With the past history of performance this company has had it was disappointing to see them behind for so many years.

If the cylinder heads are ever removed it is recommended to enlarge the valve pocket approximately .080 to utilize the full area of the intake and exhaust valves. Another modification which greatly enhances the high rpm range of these engines is to enlarge the cylinder head around the valve head area in the combustion chamber. This will greatly improve breathing although this might be frowned upon by technical tear down inspectors.

STOCK IGNITION MODIFICATION

We suggest a local tune-up shop be kept in mind to calibrate the final touches of this ignition modification on a distributor synchronizer.

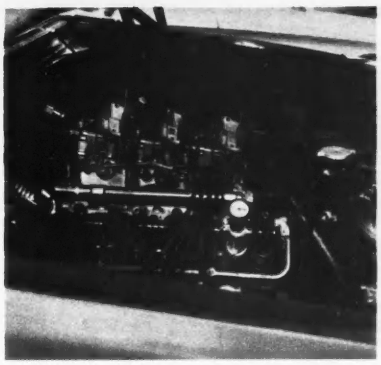
We will begin with the removal of the distributor. The distributor cap is removed and a note taken on the rotor position. This determines the position of the distributor in relation to firing order and must be replaced in the same location. The hold down clamp and bolt can now be removed along with the distributor-to-coil primary lead wire and is lifted gently and removed.

Before modifications begin, we must determine the condition of the distributor. The distributor shaft bushings are checked for any excessive clearance by moving the shaft sideways, this is very important. Bad distributor bushings will cause the opening of the points to vary. If a distributor synchronizer is available it is recommended procedure to run the distributor from "0" rpm to approximately 4500 rpm, keeping track of the stock ignition curve and observing the condition of the point breaker cam, by the firing location of each cylinder on the machine. A variation in point opening will cause improper firing in balance to the other cylinders.

Original Distributor Curve

DISTRIBUTOR RPM	AMOUNT OF ADVANCE
375	Start
500	1 degree
750	5½ degrees
900	6½ degrees
1000	7 degrees
1150	8 degrees
1300	9 degrees
1625	10 degrees
1800	11 degrees
1900	12 degrees
2100	13 degrees
2300	14 degrees

Total amount of distributor advance, times crank speed, equals distributor advance in crankshaft degrees. 14 x 2 = 28 or 38 degrees being desired as total lead of 10 degrees should be used as stock setting.



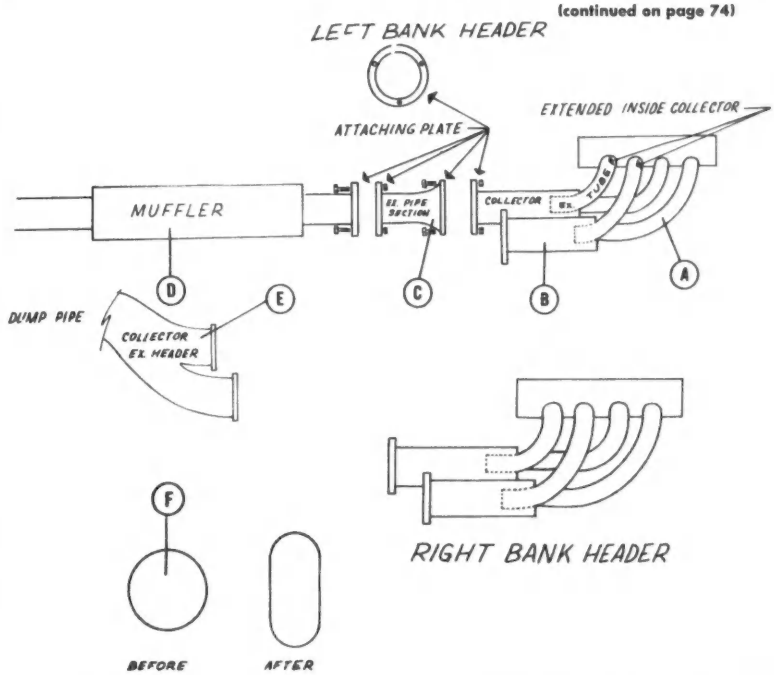
Exact valve gaping is very important in gaining maximum power, as .003 error will result in approximately 9° difference in timing so P&G Gapper is used.

The driver compartment is roomy and comfortable giving good feeling of control. A tachometer is highly recommended for engine control, shift points.

Modified Distributor Curve

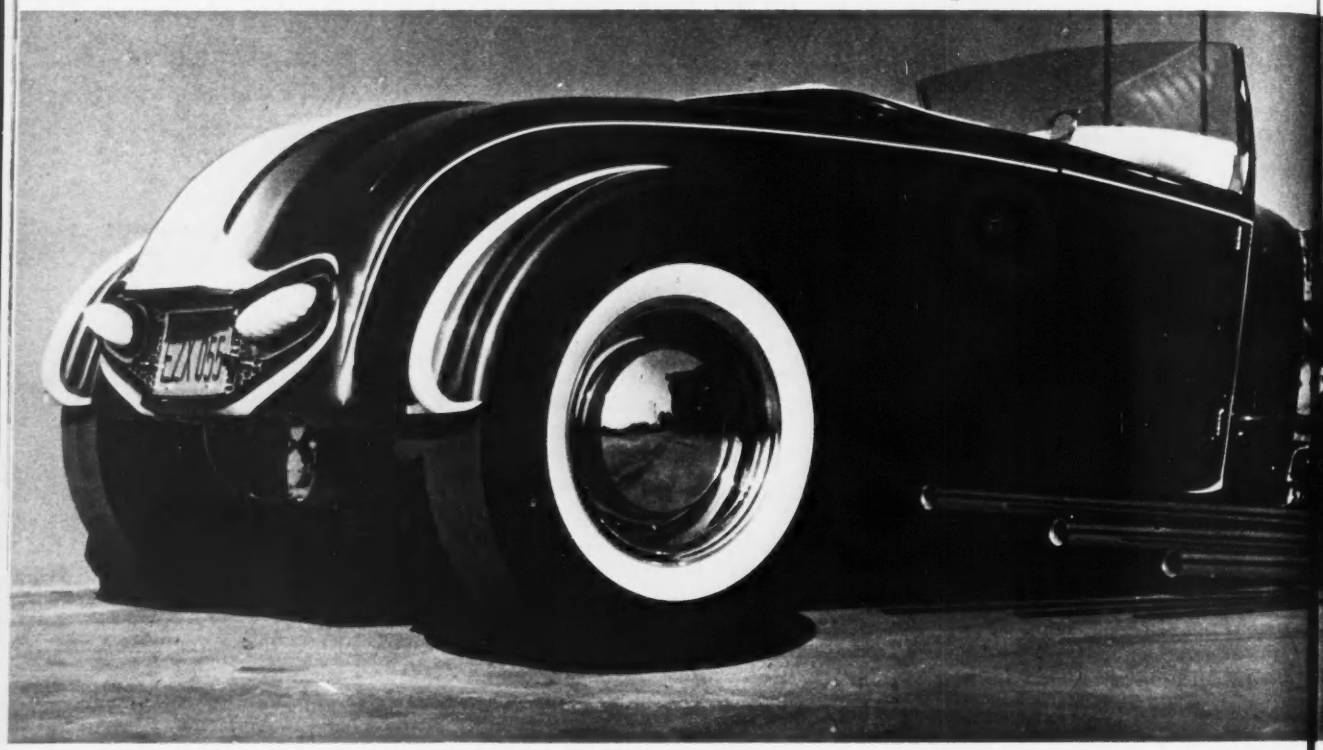
DISTRIBUTOR RPM	AMOUNT OF ADVANCE
375	Start
500	1 degree
750	5½ degrees
900	6½ degrees
1000	7 degrees
1150	8 degrees
1300	9 degrees
1625	10 degrees

(continued on page 74)



(A) Exhaust tube diameter is 1¾", length is 24". (B) Collector tube diameter is 3", length is 12". (C) Exhaust pipe section diameter for maximum power 2½", (removable for unplugging). (D) All four mufflers 30" glass packs, same core size as exhaust pipes. (E) For class rules a collector exhaust header can be installed made from two sections of 3" pipe mating into a 4" tube. (F) Tubes of 3" and 4" must be flattened 1¾ inches to mate up to collector pipes from the headers.

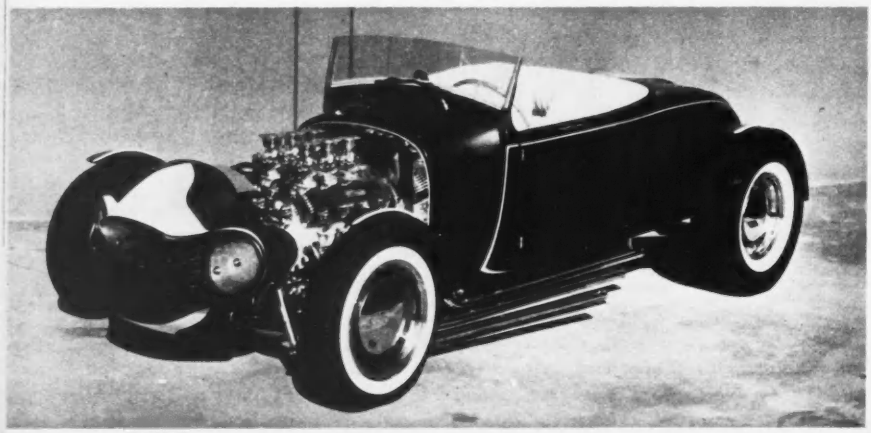
STREET AND SHOW ROADSTERS

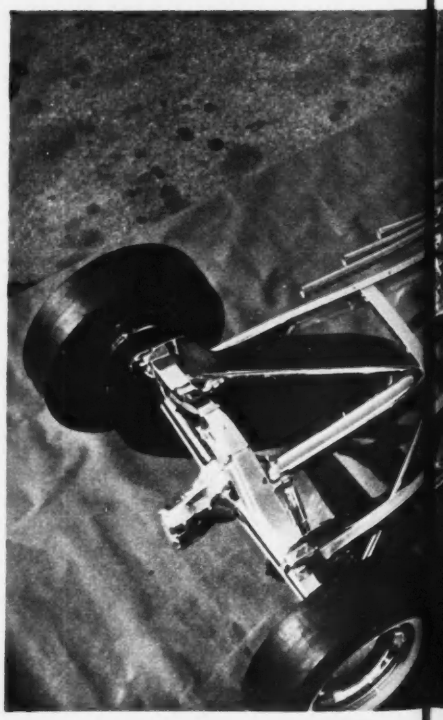


The "Emperor" twice winner of World's Most Beautiful Roadster award is truly a work of art down to last detail. Body and paint work was done by Barris of North Hollywood. Color is Kandy Burgerine (mix of Burgandy and Tangerine), pearl trim.

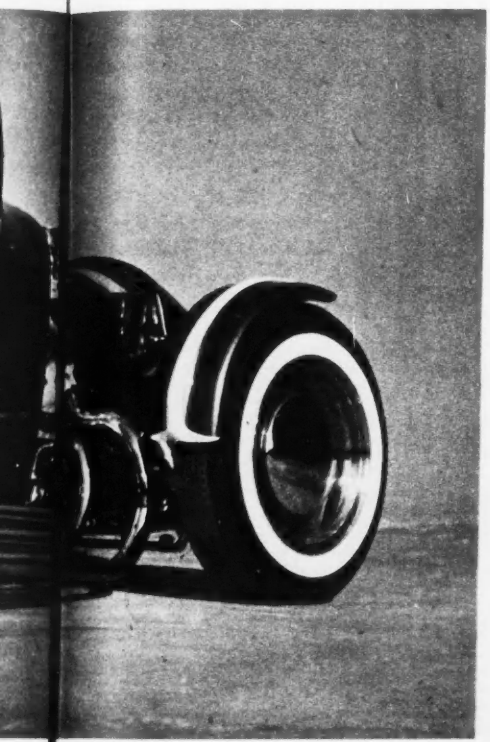
Right. Complete frame and all running gear is chrome plated. Frame is Z'd and special tube cross member mounts LaSalle box with Ansen Posi-Shift linkage. Cad Eldorado mill is run with six carbs, Vertex mag, wild chrome lakes headers.

Grille and shell are entirely handmade and house canted '58 Merc lights set into concave housing covered with frosted plastic. Grille is chrome mesh type with oval tubes for added decoration. Seams are filled, door, trunk corners rounded.

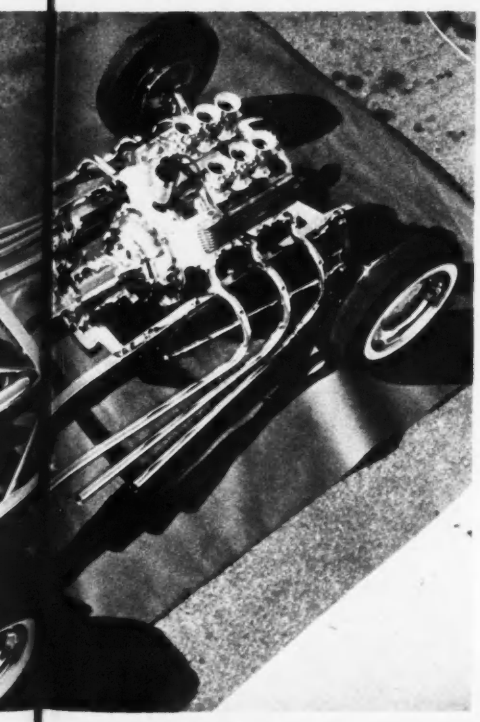


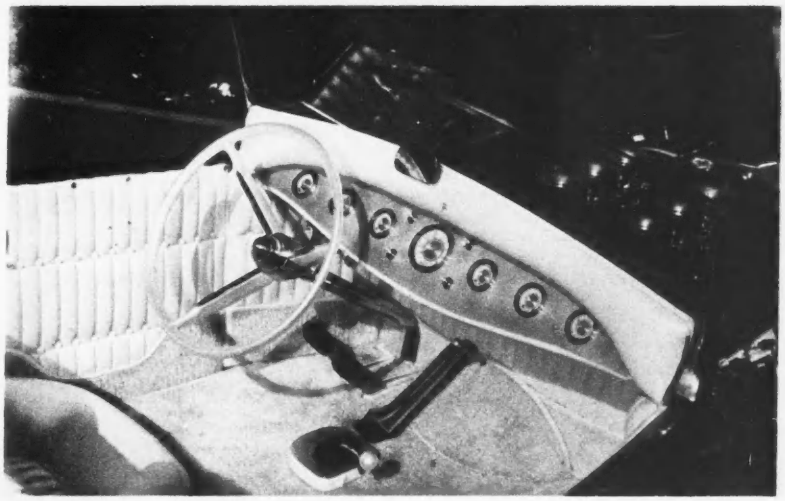


CHUCK KIRKORIAN
'29 Ford
Fresno, Calif.



Photos by George Barris

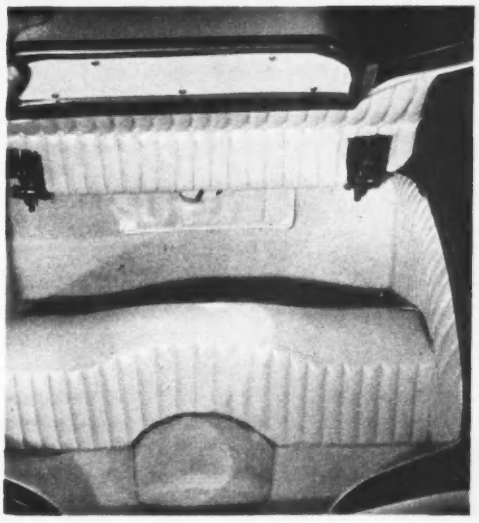




Beautiful interior is styled by Martinez, Lynwood, in pearl Naugahyde. Rug is also pearl. Swivel bucket seats are used and are button tufted. Steering wheel is pearl colored '59 T-Bird while dash is satin finish aluminum set with boat instruments.

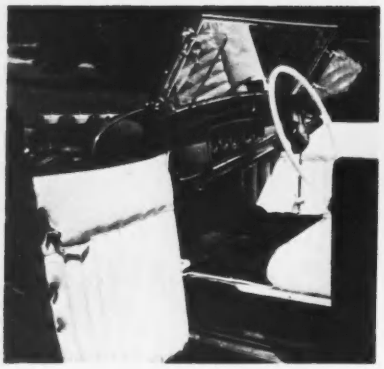
Rear type grille is used and mounts license plate, canted '59 Pontiac taillights. White slices of frosted plastic are mounted to red lenses. Louvered rear pan, rolled under and extended under body. Side rear wheel wells covered and molded to smooth body sides. Wheels, 14" chromed reversed with Merc hub caps.

Trunk compartment is not forgotten as it also is fully upholstered in pearl Naugahyde, plush rugs. Lincoln Continental hood hinges used to operate trunk lid. The license light is worked into frenched housing on deck. Body channeled 5", bolted to frame.

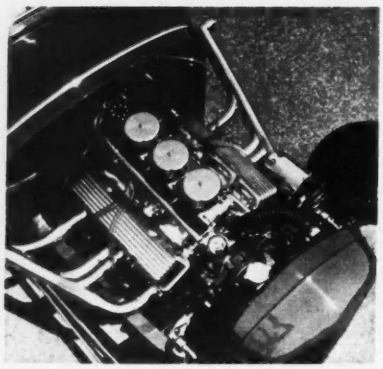


STREET AND SHOW ROADSTERS

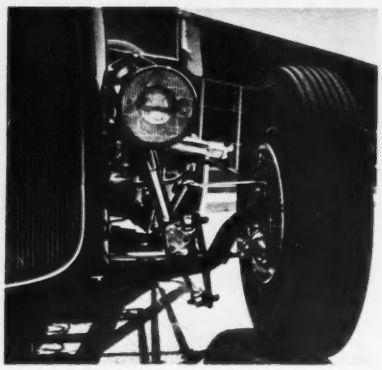
BILL NEUMANN
'31 Ford
Glendale, Calif.



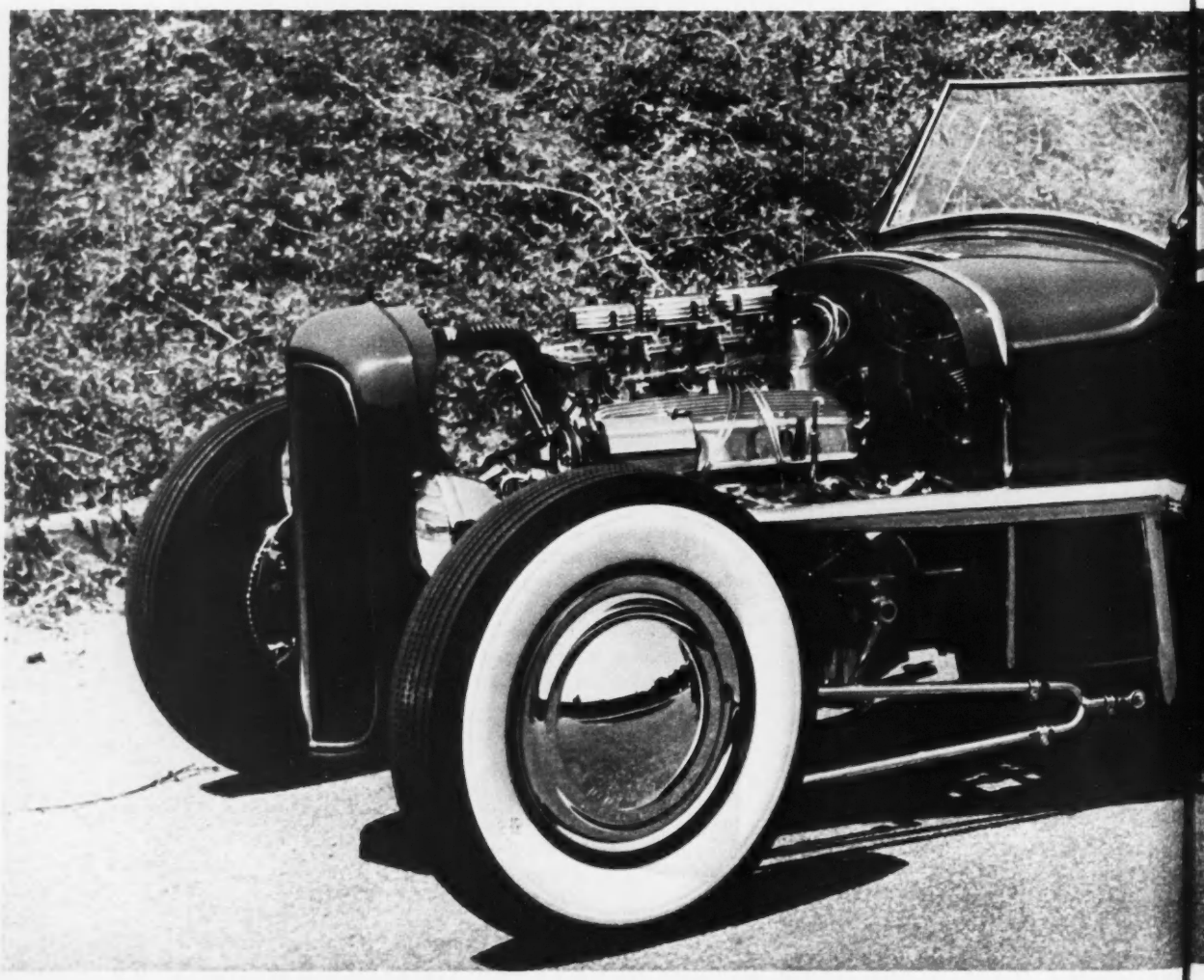
Interior features rolled and pleated white Naugahyde and black Nylon rug. Handmade dash is set with Auburn panel, and Stewart-Warner instruments.

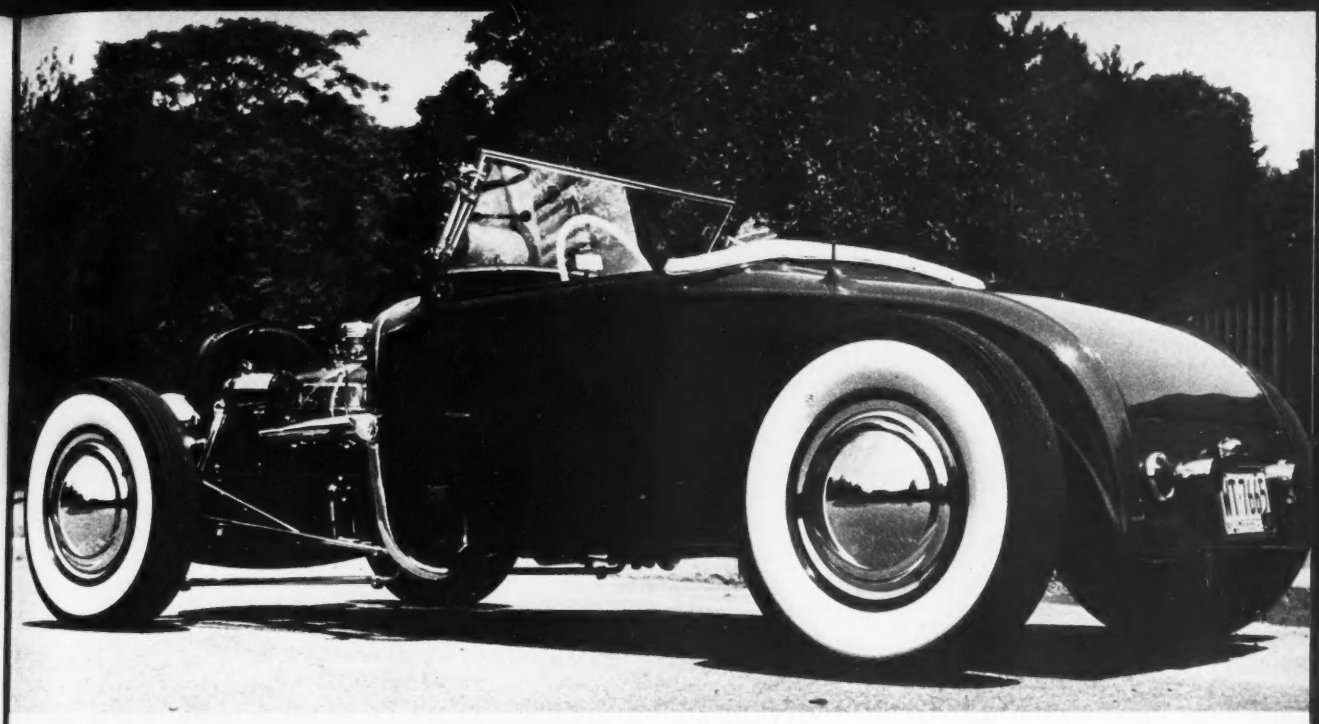


'58 Chevy mill is bored to 301 cu. in., runs Herbert roller cam, Jahns pistons, Vertex mag and triple carbs. Heads are ported, polished, milled to 12-1 ratio.

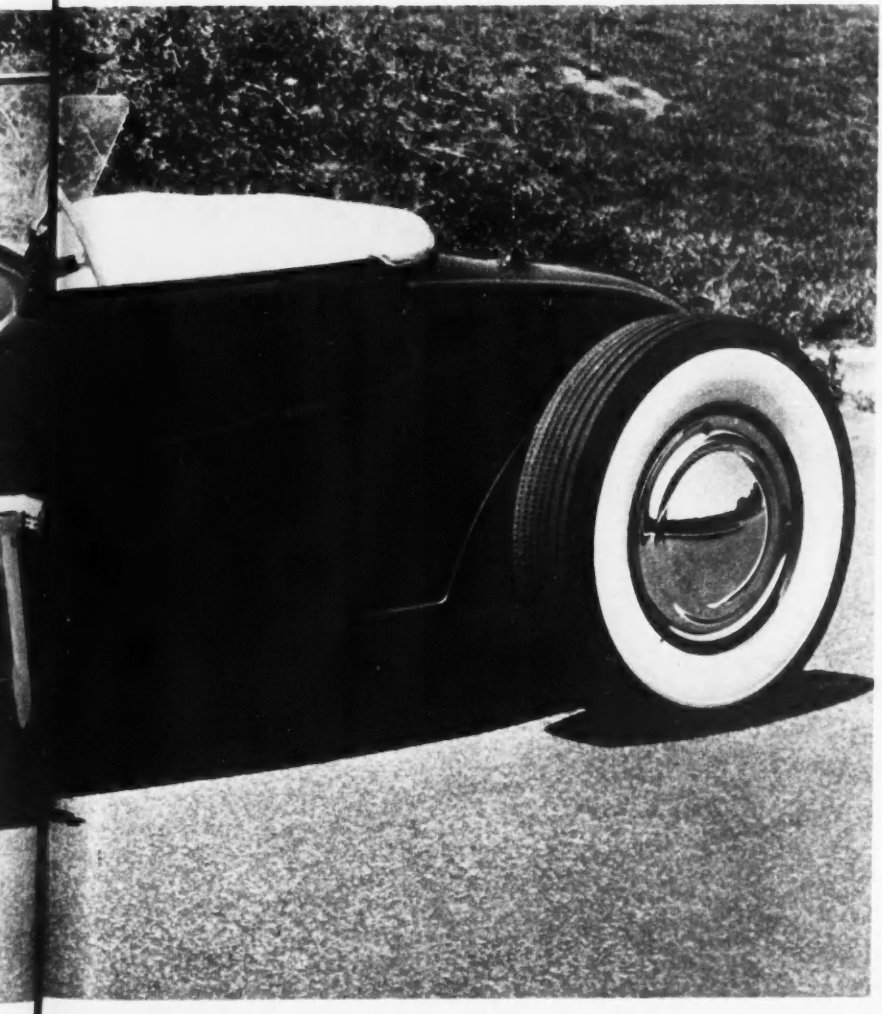


Neat front end features handmade air scoops on '48 Lincoln brakes. Combination spring, shock mount is used with split radius rods, tube dropped axle.





Photos by Bill Neumann



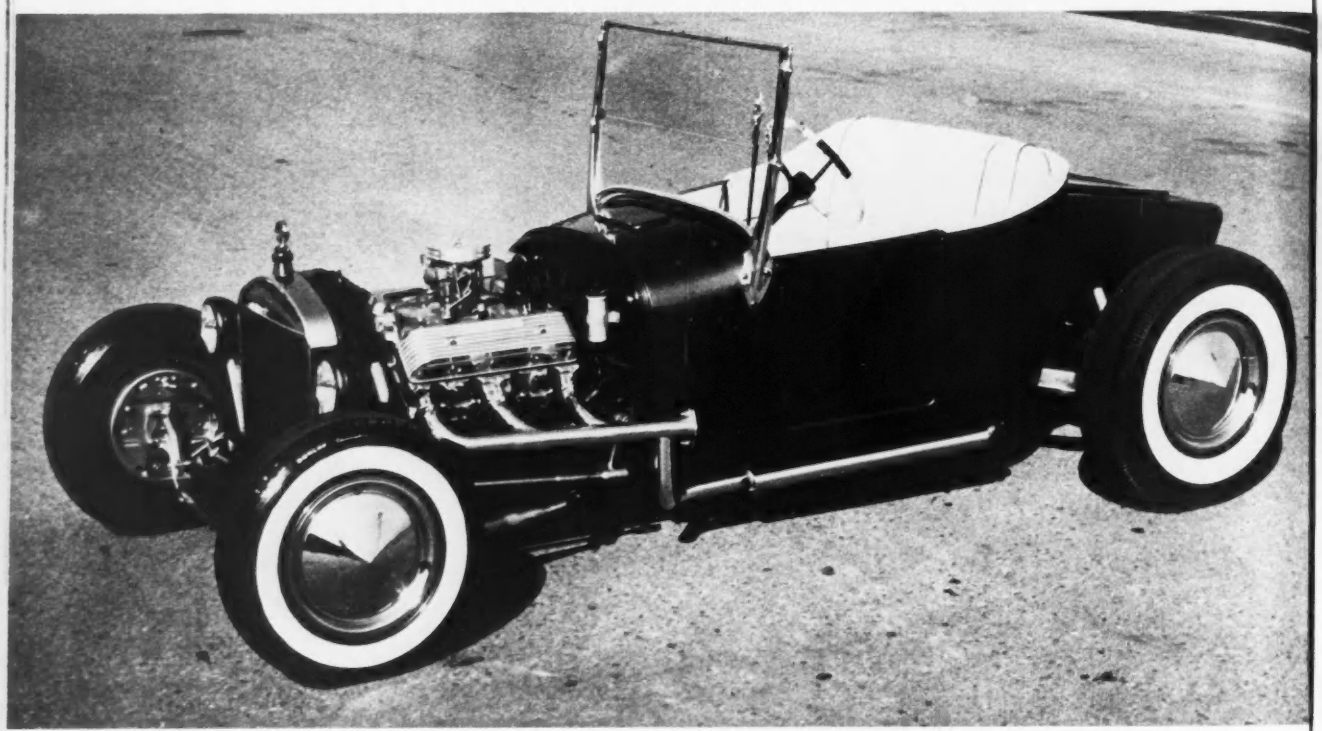
Immaculate construction done throughout. All seams welded and contours reground back into metal. Door hinges are molded as is aerial on rear deck. The frame is Z'd 3 inches and the body is channeled 9 inches. Tapered headers were handmade along with knock-off plug at end which is opened at drags, otherwise exhaust is routed under car to twin pipes in rear pan. Taillights are '50 Pontiac. Radius rods have right and left hand threads at each end to make easy caster adjustment, are ball mounted which makes for good ride.

Grille has been sectioned 3 inches to gain added ground clearance, hood edges are covered with smooth band. Most beautiful part of car is the firewall, which is completely free of wires and equipment. It was made from 1/8 in. plate then welded and molded to body. Windshield is stock height and uses original windwings. Chromed engine is mated to a '48 Ford trans via a Weber alum. flywheel and Maxi-tork clutch. Rear end is '32 Ford running 3:27 ratio. So far Bill has won almost 100 trophies for show and go competition including first place roadster class at the '59 Detroit Nationals. Quarter mile speed run as is was 113 mph and 12.8 e.t.

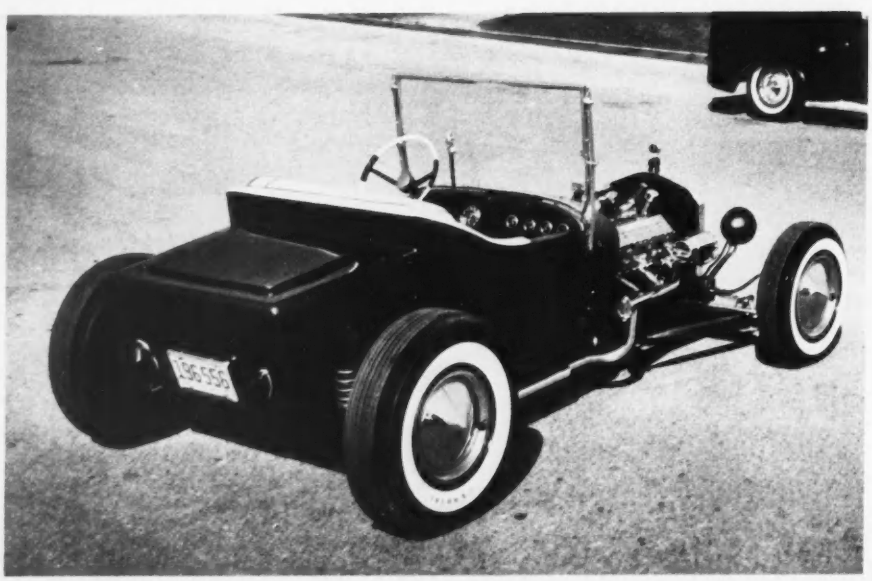
STREET AND SHOW ROADSTERS

GARY COOPER
'31 Ford
Vancouver, B.C.

Trim interior was styled by Cambia of Vancouver, B.C. in white Naugahyde. Stewart-Warner gauges keep tabs on mill. Long stick shift works '37 LaSalle box which is turned by an 11" clutch and pressure plate. Windshield is stock.

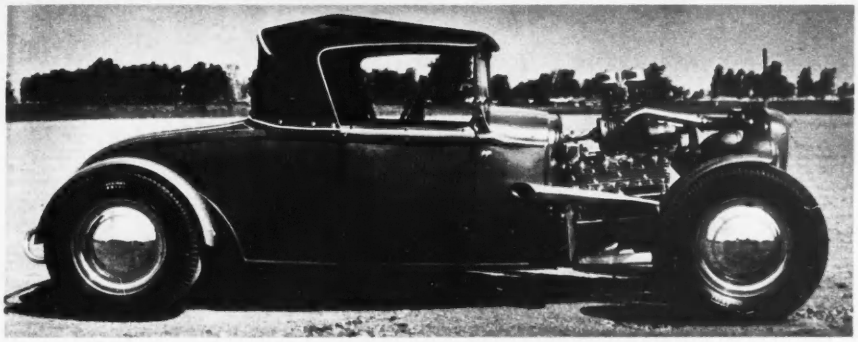


Photos by Milt Goodman



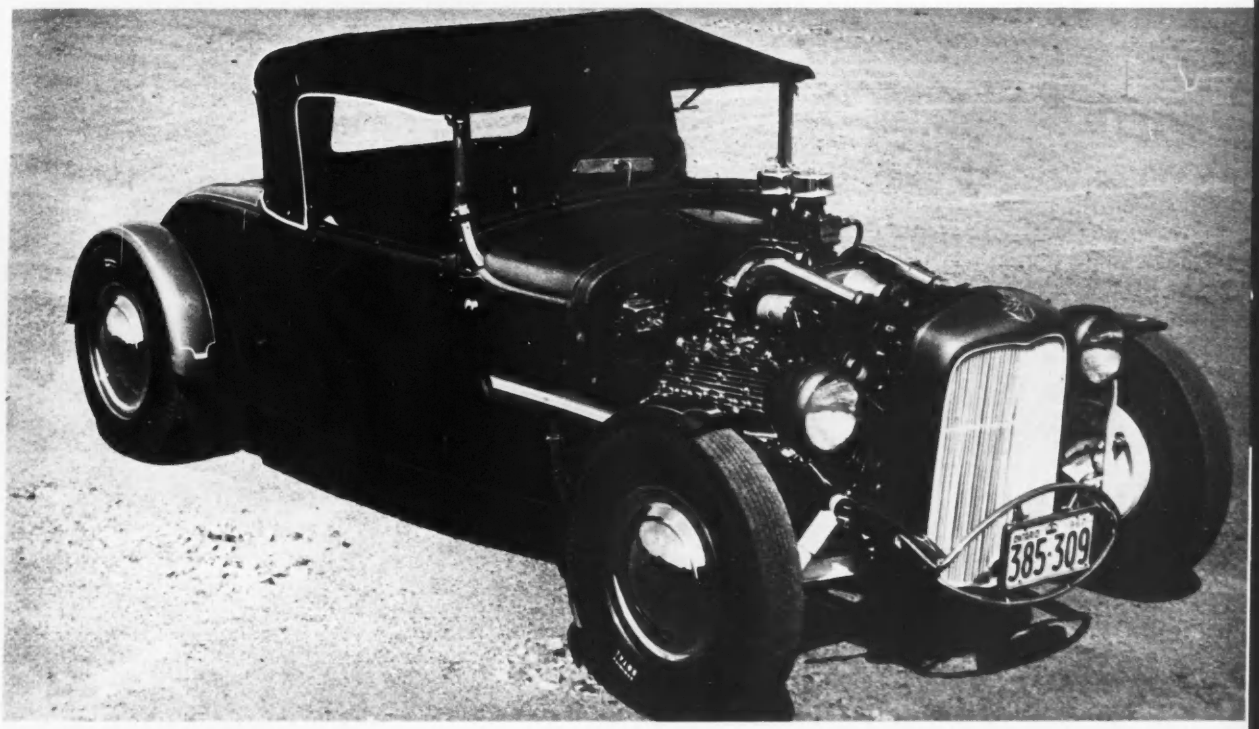
Body is channeled 4 inches, features a handmade turtle deck. Engine is a 324 cu. in. '58 Olds which is stock except for the custom exhaust pipes. Front end is '34 Ford with dropped axle and 5.90 x 15 inch tires. Frame was handmade by Gary from 4" channel iron with 3" used for cross members. Wheelbase, 104 in.

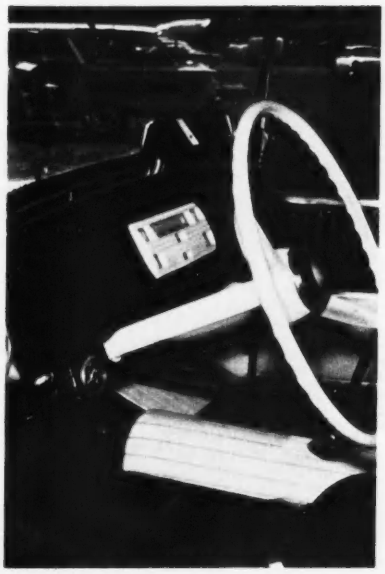
Rear end is '50 Olds coil sprung using Hillman springs with trailing arm mounts. Rear end ratio is 4:11 and uses open drive shaft, Delco shocks, and Olds brakes with 8.20 x 15" tires, Buick rims.



BILL BALZER
'31 Ford
Toronto, Ontario, Canada

Very neat roadster features an 8 inch channel over 8 inch Z'd '32 Ford frame. Front end, steering also '32. Rear end, '34 Ford as is spring and cross member. Brakes, front spindles are '47 Ford.

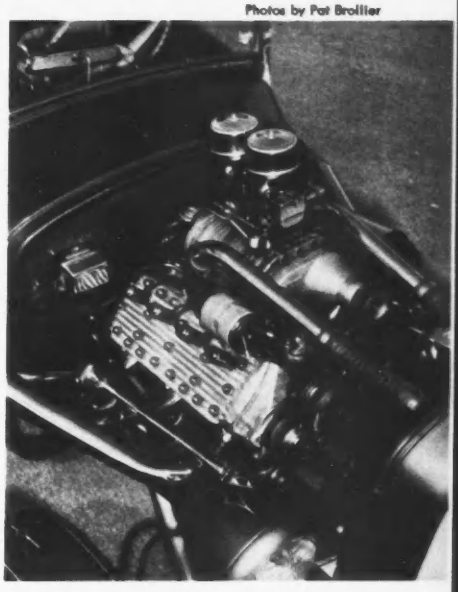


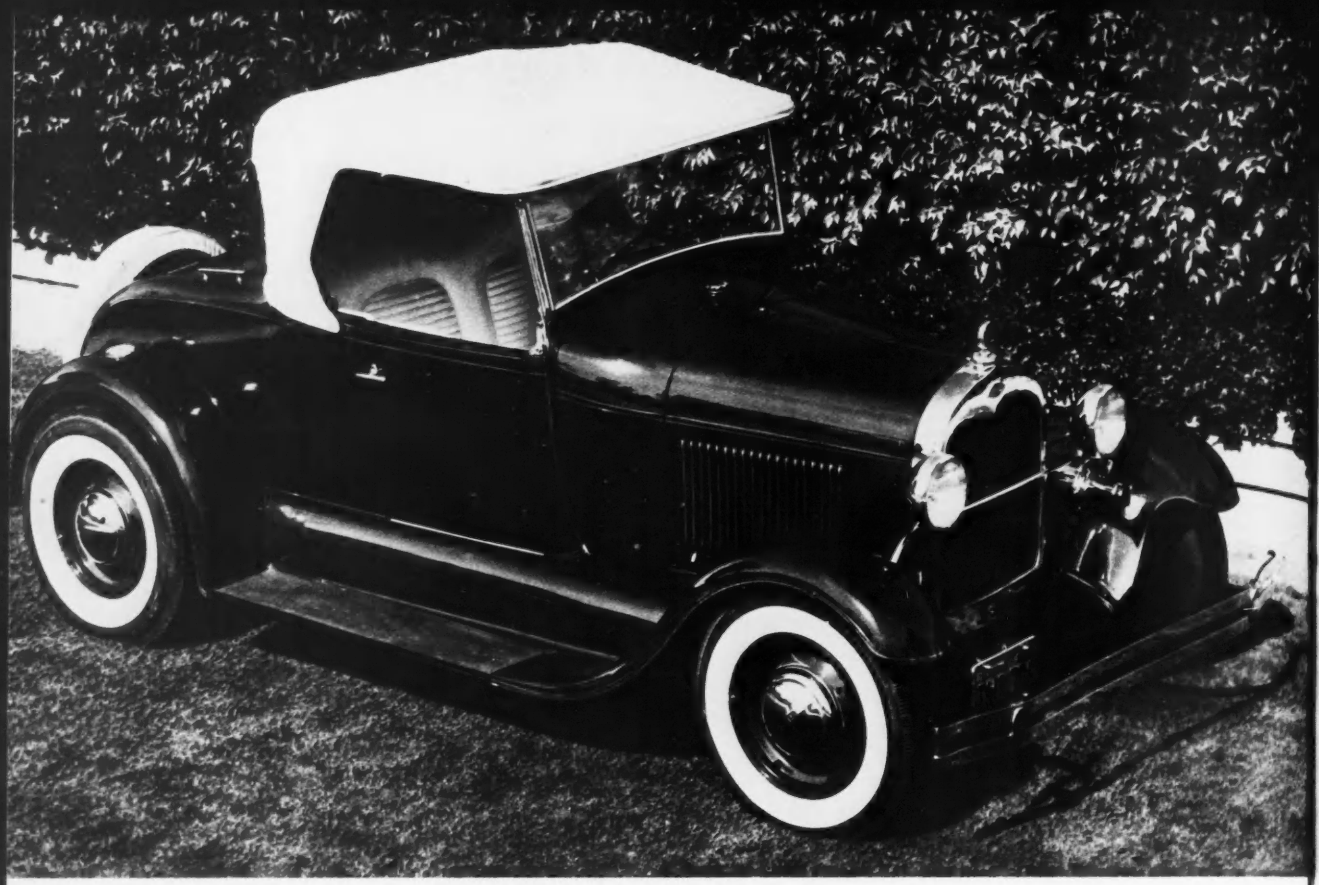


Deuce grille is filled in the center, sectioned 3½ inches and protected by an oval shaped nerf bar which also mounts the license plate. Smooth steel firewall was added and the entire car painted with 15 coats of deep metallic blue lacquer. Tapered headers are made from '36 Ford driveshafts, chrome plated.

Interior is upholstered in cream and black leatherette as is top and tonneau cover by T&M Custom Auto Trim in Ontario. Dash is padded and covered in leatherette with '40 Ford deluxe instrument panel. Steering wheel is '54 Ford. Transmission is '39 Ford with 26 tooth Zephyr gears and operated with a remote shift lever. Engine is '48 Merc bored .060 over with Weber cam and adjustable tappets, Edelbrock pistons, and Fenton polished aluminum heads. I.T. charger mounted on top supplies extra punch. Carbs are Stromberg 97's.

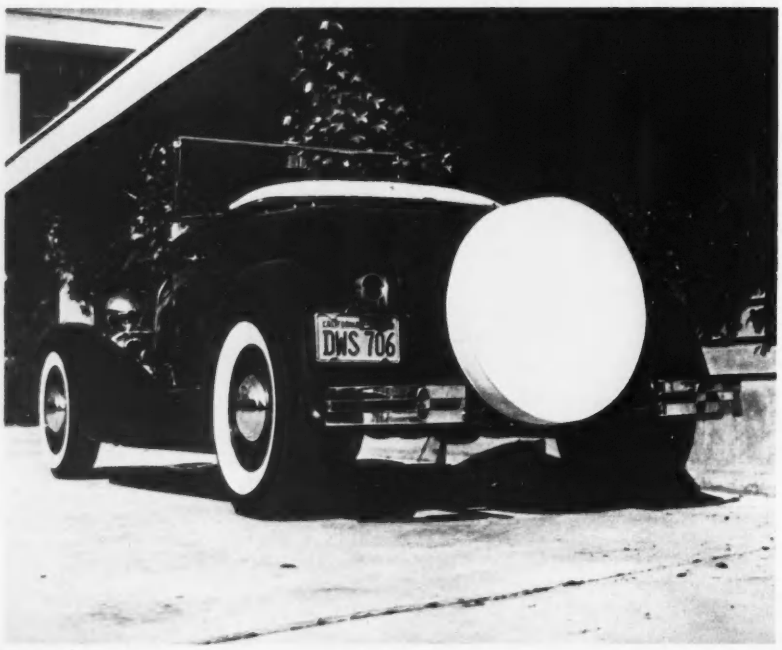
Photos by Pat Brollier





STREET AND SHOW ROADSTERS

TOM MADRUGA
'29 Ford
San Diego, Calif.

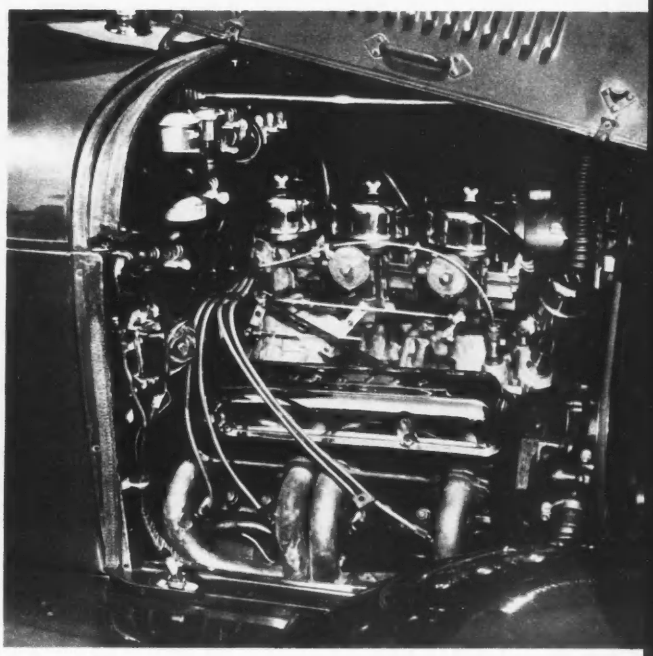


Beautifully restored body carries classic lines except for 15 inch wheels. Front end runs complete '40 Ford set-up and '54 pick-up steering box. A '40 Ford rear end is also used along with the hydraulic brakes, and seal beam lights. 3 years and $3400 has been invested.

Dropped axle is used to lower front end and 50-50 tube shocks are used front and rear. White top, spare tire cover contrast nicely with deep '55 Caddy Mandarin red lacquer paint. Dual pipes emerging from between rear bumpers are only hint of V8 power in "A" rod.

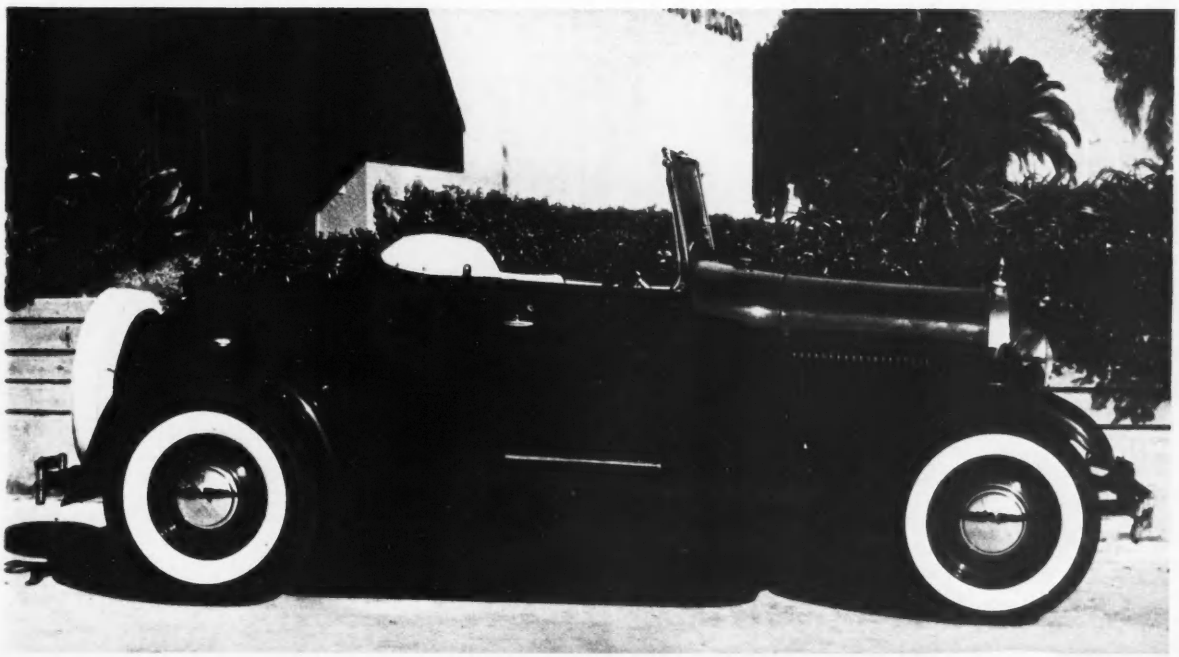
Immaculate interior features rolled, pleated white Naugahyde, and red rugs. Dash also has many chrome goodies including Sun tach, S-W gauges, '51 Ford steering wheel.

Unstock engine compartment hides '55 Corvette mill bored to 283 cu. in. with solid lifters, three pot manifold running Rochester carbs. Radiator is a special heavy-duty unit.



Photos by Bob Hardee

Gas tank is in stock cowl location and uses Bendix electric pump to feed mill. Radio speaker, starter button, light switch, and tach relay are located under the front seat, while battery is in the trunk. '40 Ford trans is run with 3:78 rear end gears.



CAR CRAFT'S DREAM ROADSTER

drawings & design by Bob Hubbach and Chuck Pelly

THE CONCEPT BEHIND THE DESIGN of our roadster results directly from the fact that not every custom car enthusiast can find the mint condition '27 T or Deuce body to start with – therefore we have based our ideas on the feasability of employing contemporary automotive parts which can be obtained from dealers, wrecking yards and automotive supply houses...

The main body panels are from two cars – the front (hood, fenders, grillework and headlights) are 1960 Pontiac, while the rear section is from a '60 or '61 Chevrolet Corvair.

As shown in the sketches by Bob Hubbach and Chuck Pelly, the hood is sectioned and re-welded to match the Corvair rear end. An extra section of Corvair panel above the body breakline is welded to blend with the Pontiac theme. The chassis might be built up from tubing for a light but strong spaceframe, or tubing could be used to build up a Ford Falcon frame shortened to an 88" wheelbase. The Corvair swing-axle can be used or a limited-slip axle and a 4-speed Corvette gearbox... this could be a real handler!

Continuing the sports-roadster theme, we'll pull two of the bucket seat units out of a Corvair Monza Club Coupe, and fill the instrument panels with such goodies as the over-sized tachometer and speedometer made by Smiths for the Triumph TR-3. Otherwise, we'll go the Stewart-Warner route on instrumentation, with oil and water temperature gauges, gas, oil pressure gauge and ammeter. Several sports car accessory houses are handling aluminum and laminated wood steering wheels that will add a final touch to the interior.

The racing windscreen is handformed, a la Scarab, and the rollbar slides into two tubes which are welded to the frames, when used on the track.

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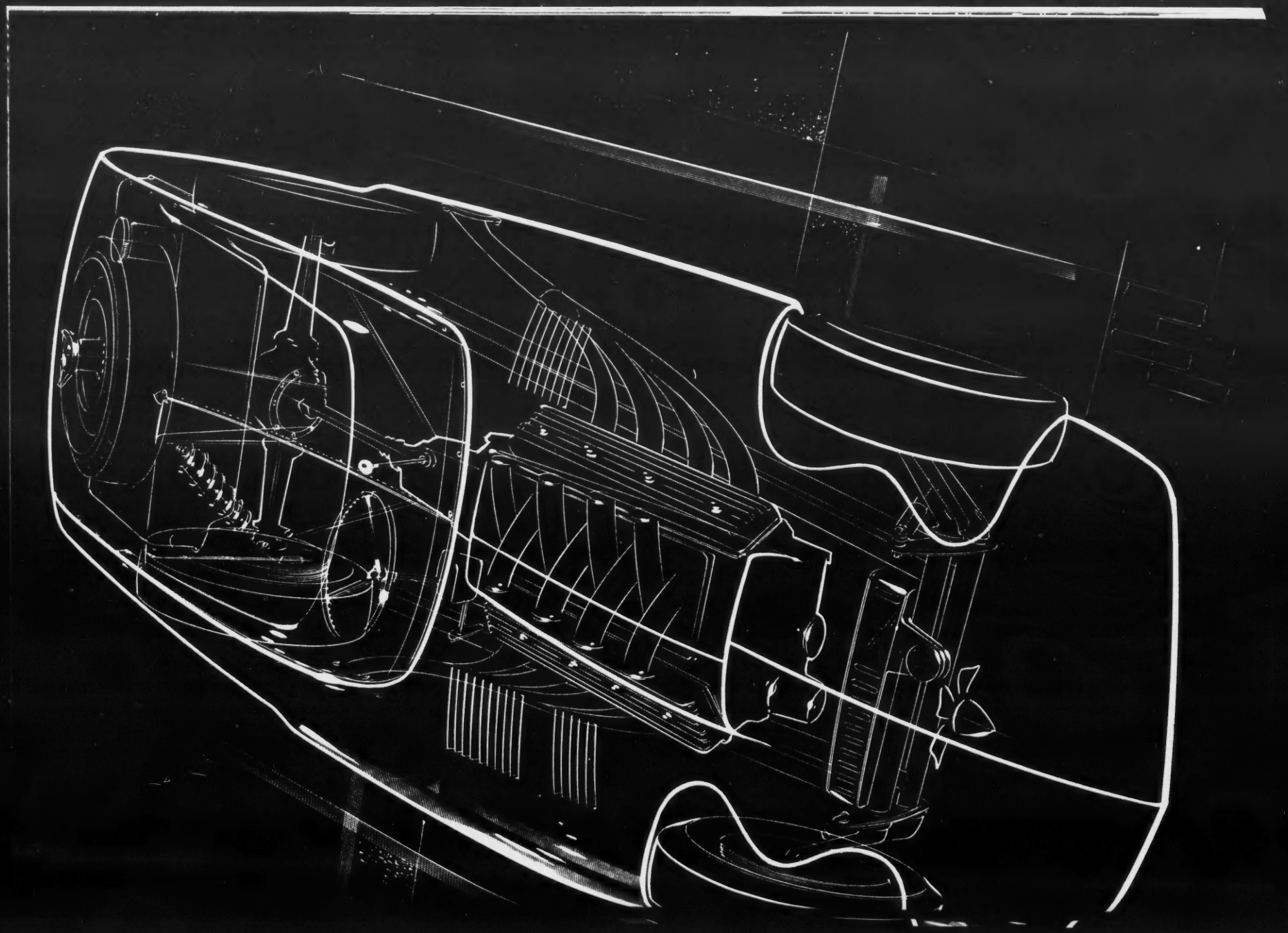

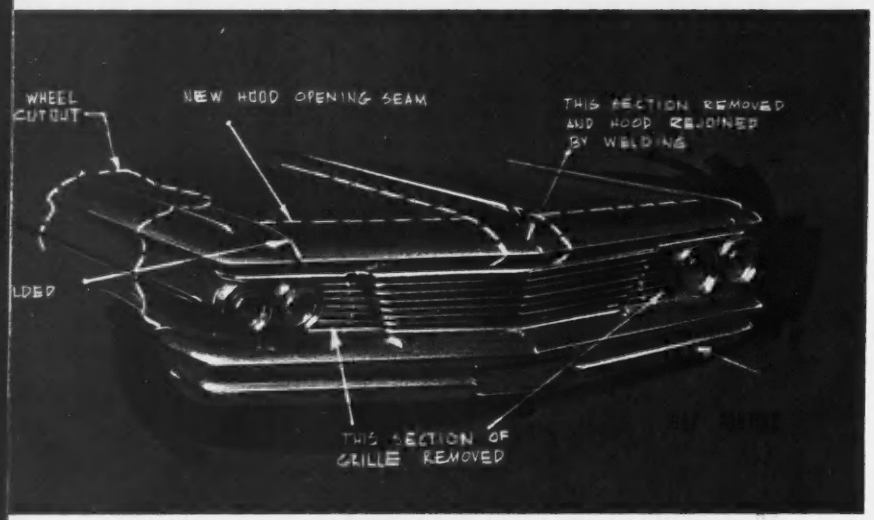

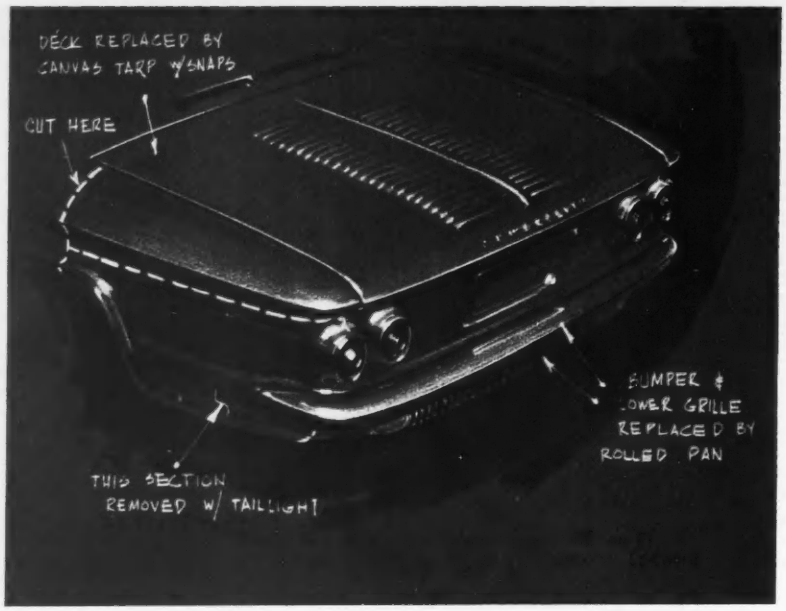

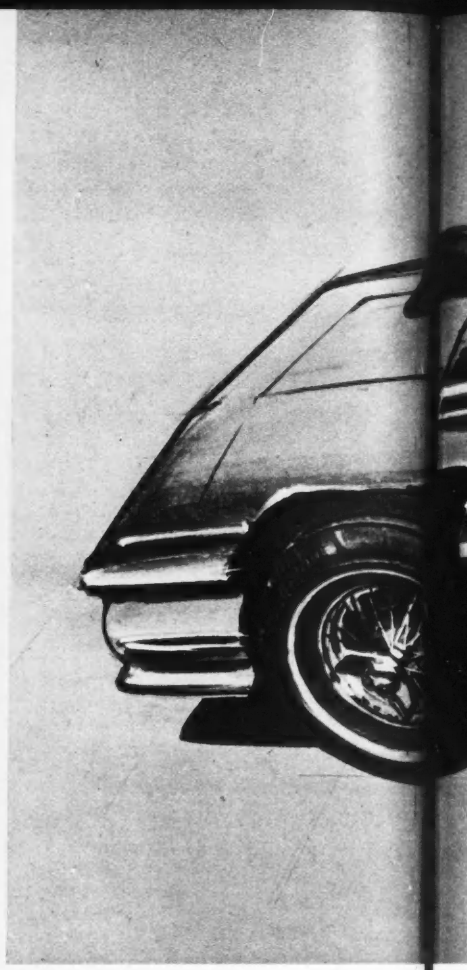

DREAM ROADSTER

The alterations at the front are as follows: 1960 Buick headlight rings are frenched, with '59 Olds parking lights in the outer rings. The inner rings will receive formed ducting to direct cooling air to the front brakes, and a recessed wire mesh screen will take the place of the lens normally found here. An alternate would be to use all four rings for cooling ducts, with pop-up headlights concealed in the leading edges of the hood, bringing the lights up to a legal 24" above the ground.

With wheel wells cut out to allow the front tires to protrude above the hood, motorcycle fenders could be installed for road use and removed at the strip or track, if desired.

Under the functional airscoop in the hood sits a Buick aluminum V-8 or a Pontiac Tempest 4-banger. The carb set-up is optional. Tuned header pipes exit from behind the front wheel openings and dump into a finned muffler jacket which carries back to a single exhaust pipe on each side. Two rows of 4" louvers are punched to straddle each side of the airscoop for additional underhood cooling. Engine cooling is achieved with a wide, chopped radiator and expansion tank, and a finned oil cooler keeps things under control, too.

The rear modifications are illustrated and are performed as follows: the rear wheel housing is cut out all the way back, exposing the rear of the tire. Sheet metal is then installed and moulded around to cap off the rough edges. The remaining taillight bezel and lamp may be left stock or altered by frenching and changing lenses, with early Pontiac or perhaps '61 Dodge Lancer.

Nerf bars are added front and rear — '61 T-Bird can be used in front and a handcrafted tube in the rear. The deck lid is removed, and the compartments for luggage and tools are on the sides — a large fuel tank with an upper, open compartment for a spare tire (up to 6.70 x 15) is to replace what would normally be the trunk, or in the case of the Corvair, the engine compartment. The spare

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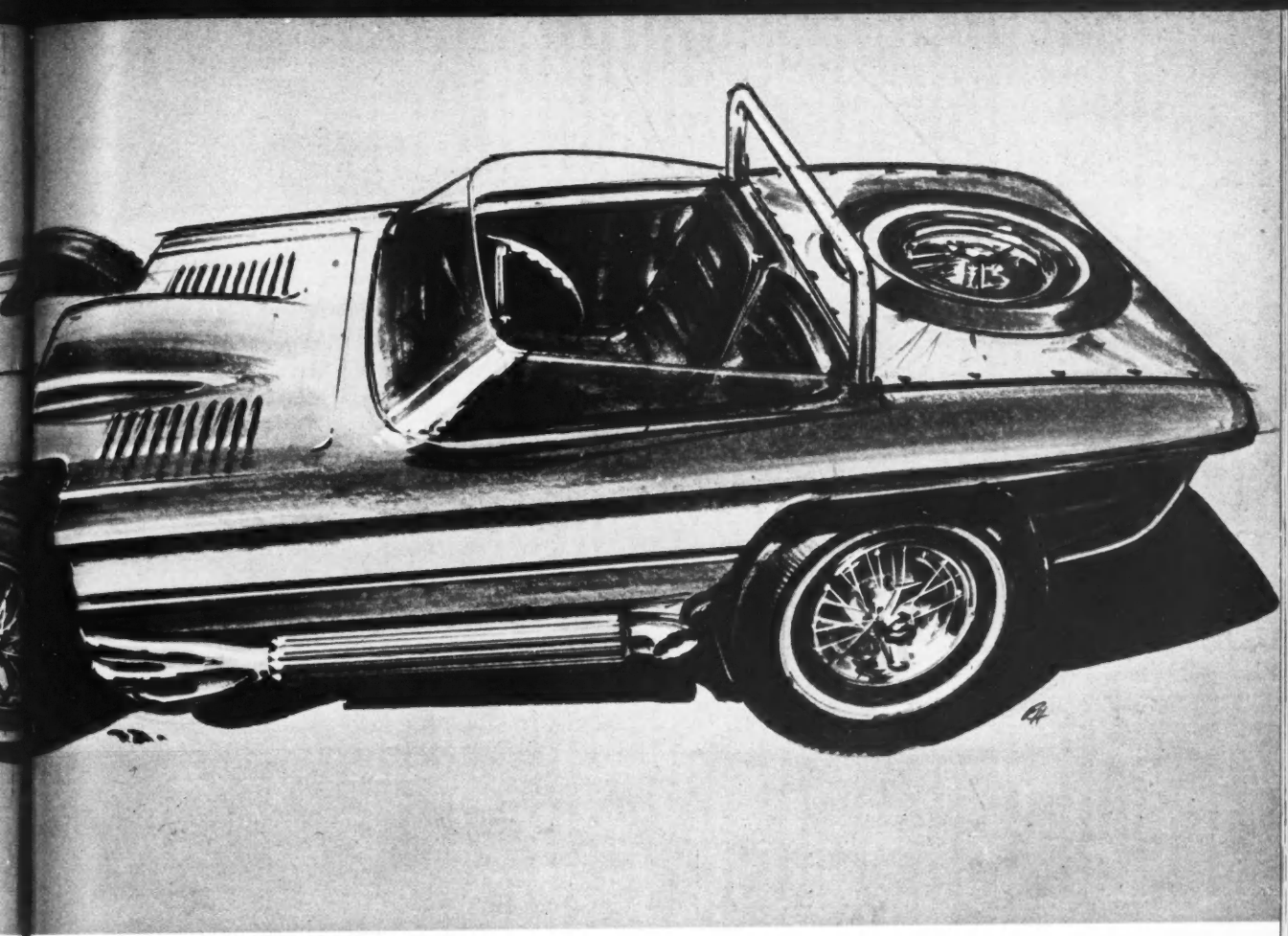

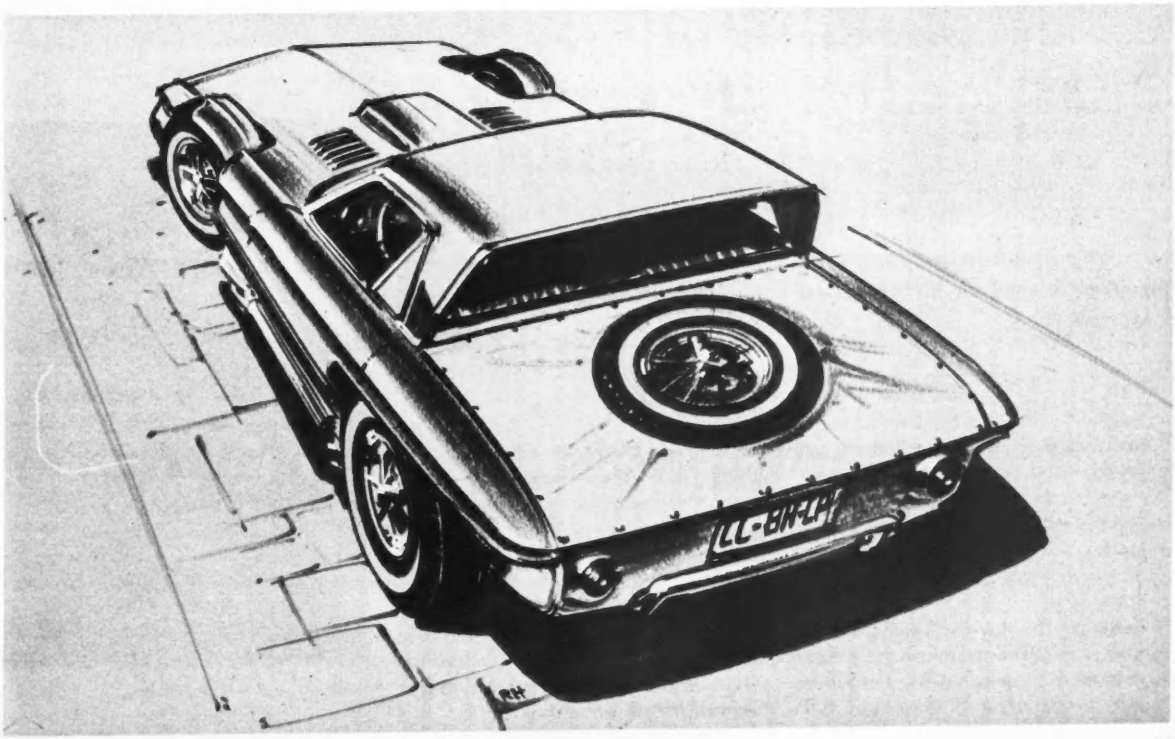
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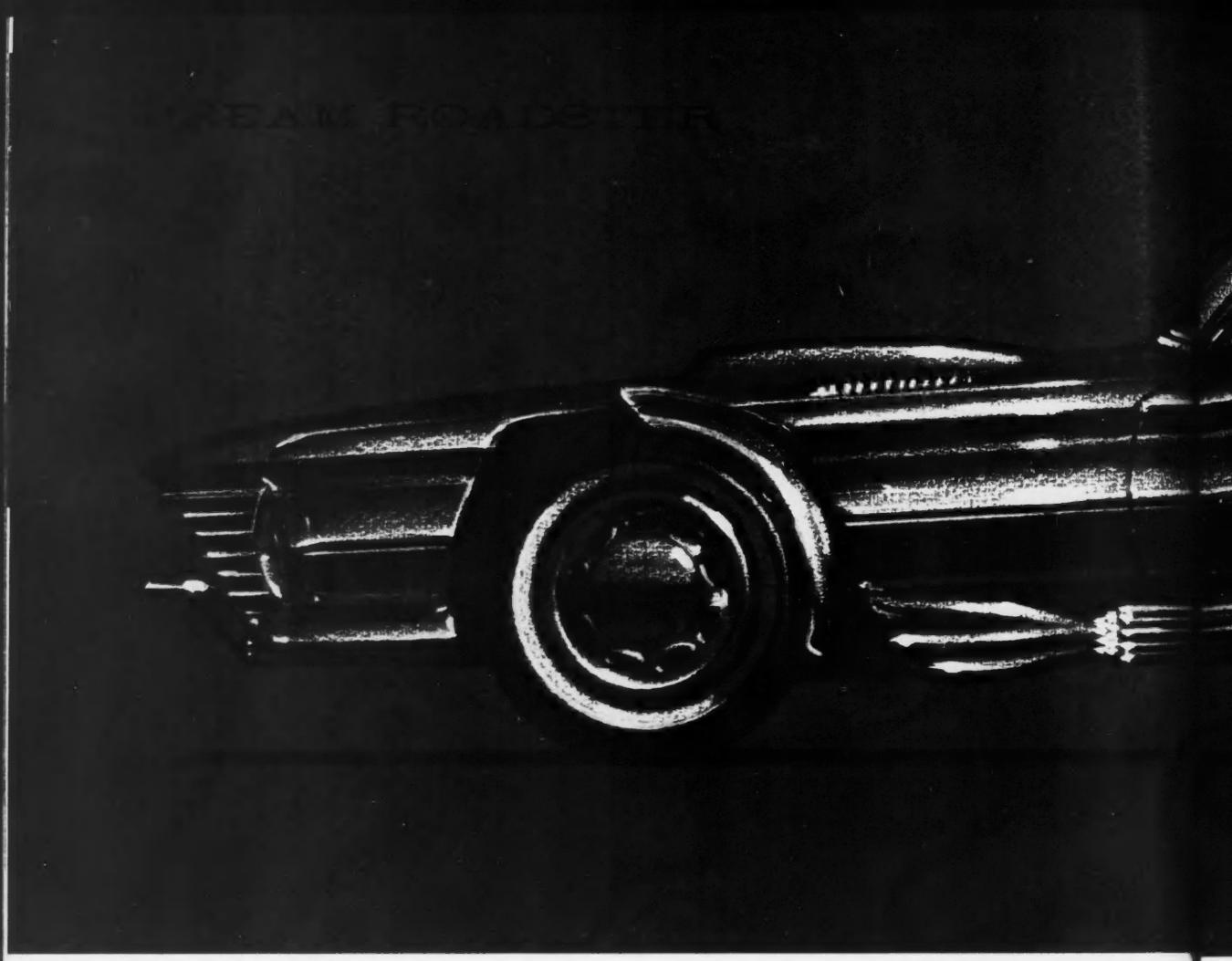


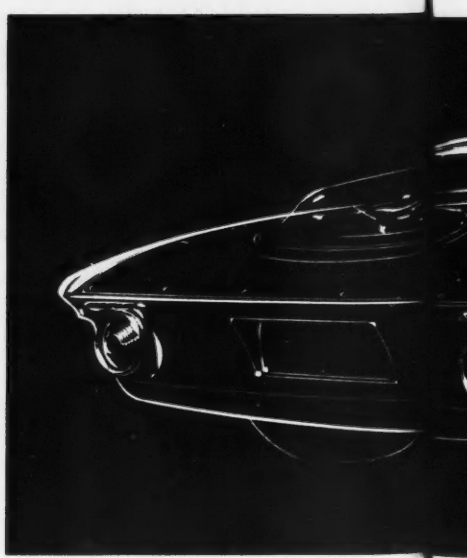
wheel and tire, now exposed, slide into the ring that forms this compartment, using a long-necked gas filler with a quick-fill cap as a center guide. A custom-made Naugahyde tonneau-tarp is snap-mounted around the perimeter of the deck lid opening, and around the inside of the spare tire opening.

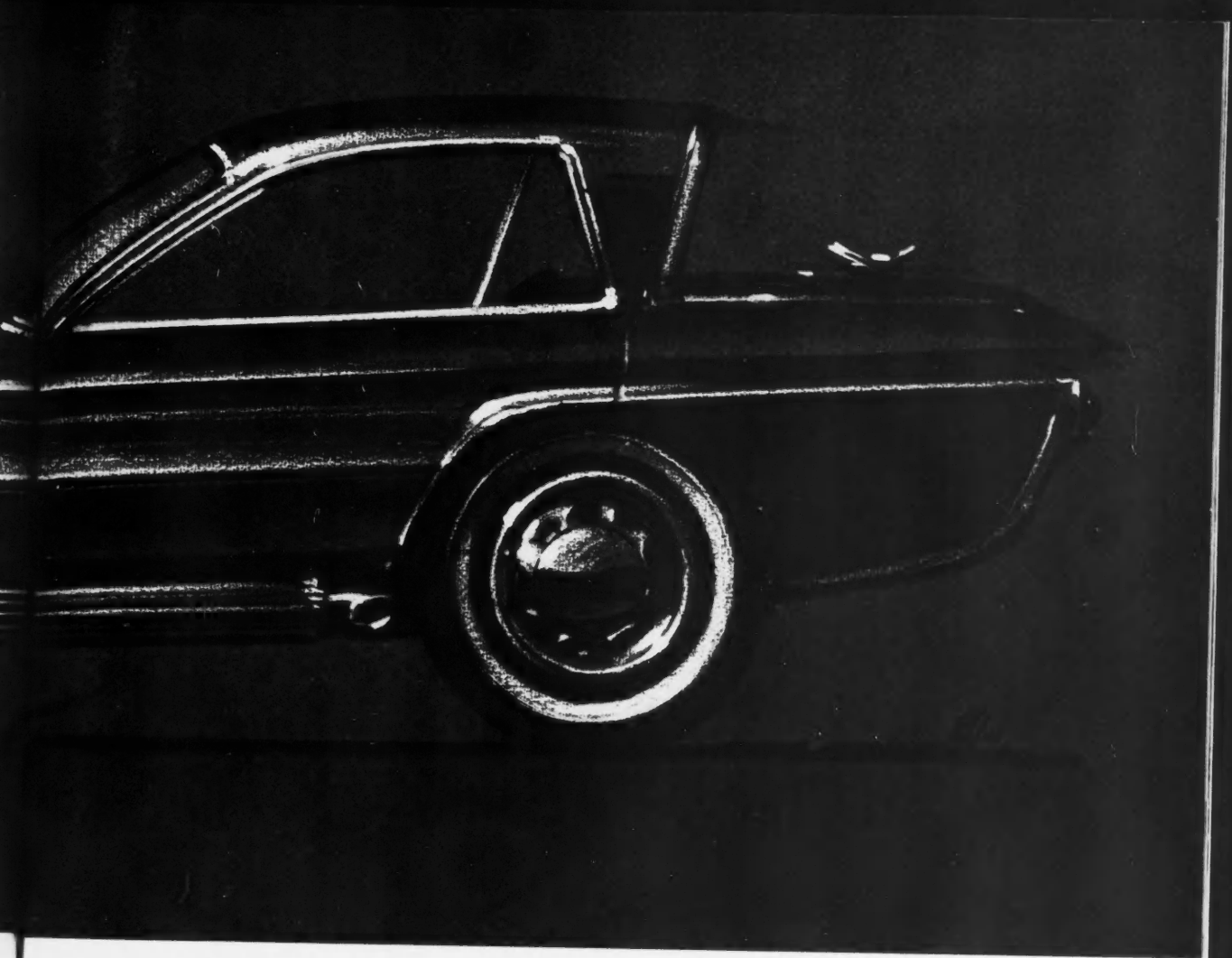
For those who wish some protection from the elements, we have included a coupe model, which uses a fiberglass top, handformed to fit windshield and some custom-cut glass for a rear window, which may be dropped behind the seats and rolled up like a conventional side window.

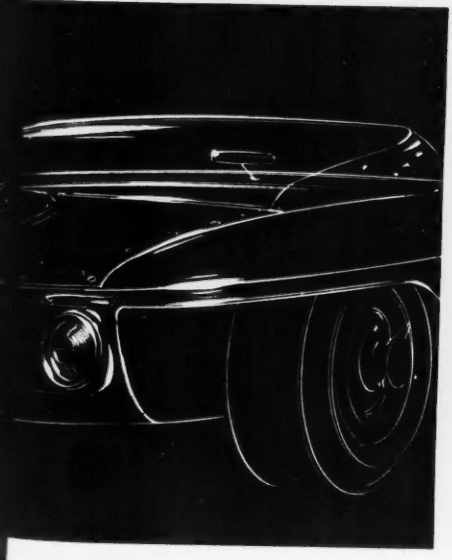
The sides are cut to allow doors as shown in the renderings... these doors may be formed of fiberglass or metal, although we prefer the fiberglass, for its lightness. The doors would be fitted with glass and roll-down mechanisms from the Karmann-Ghia Volkswagen also.

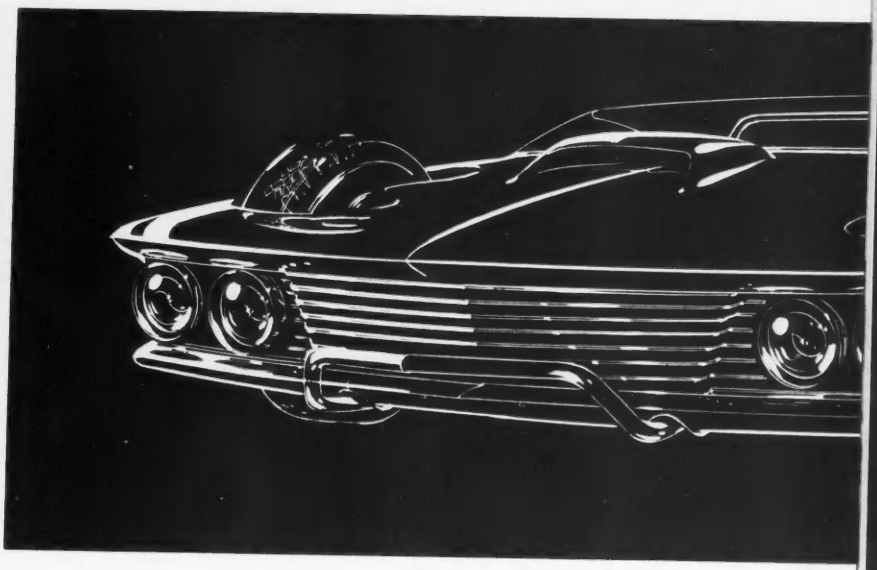
The top incorporates a roll bar with two headrests, which drop down from the bar and are adjustable for positioning. The top will always line up correctly, because the roll bar must slide into the opening provided by bracing tubes on each side and clips which secure the racing windscreen. Therefore, variations are possible using the coupe body and roadster windscreen. The roadster should also have a Naugahyde tonneau cover which folds down behind the seats when not performing its role of covering the bucket seats.

Tires are 6.70 x 15 at the rear, with a variety of smaller rims and tires for the front. Traction Masters would add extra bite. The overall height of the roadster is a mere 38", while the coupe towers 47" from ground to top. Overall length of both is 160".





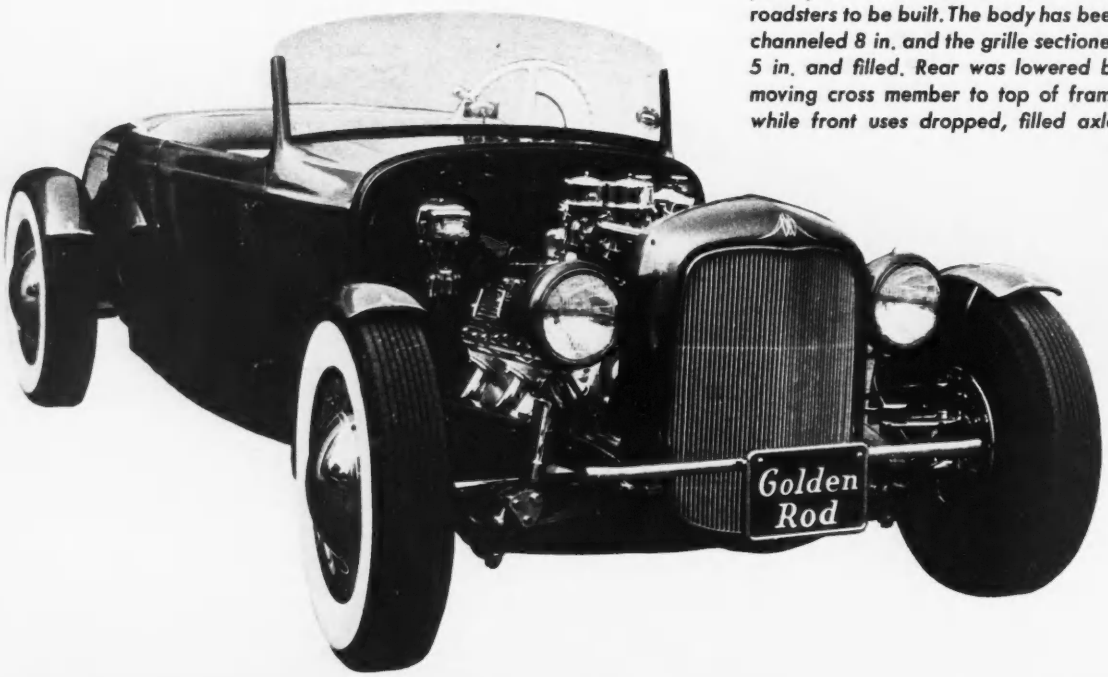




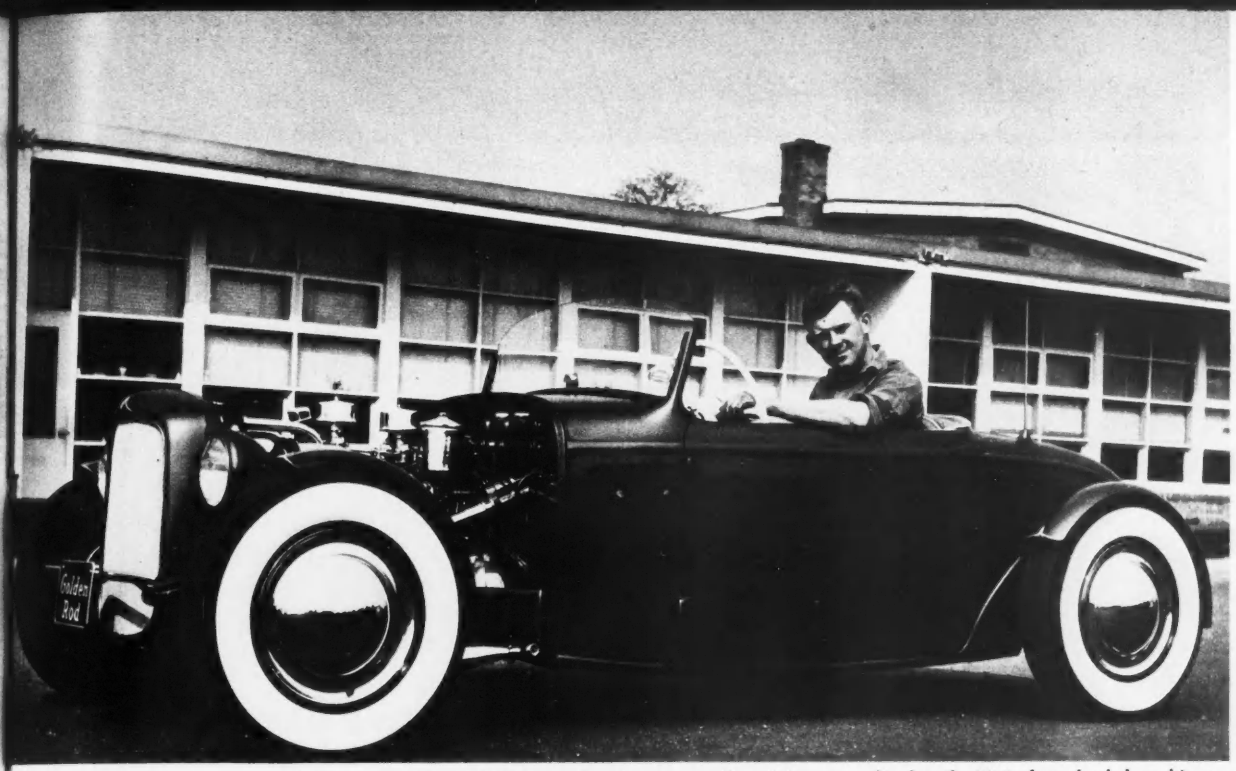
STREET AND SHOW ROADSTERS

JACK LENTZ
'32 Ford
Belford, N. J.

The "Golden Rod" aptly named due to the beautiful 20 coat gold tone lacquer paint job, is one of the best east coast roadsters to be built. The body has been channeled 8 in. and the grille sectioned 5 in. and filled. Rear was lowered by moving cross member to top of frame while front uses dropped, filled axle.



Photos by Woody Higgins

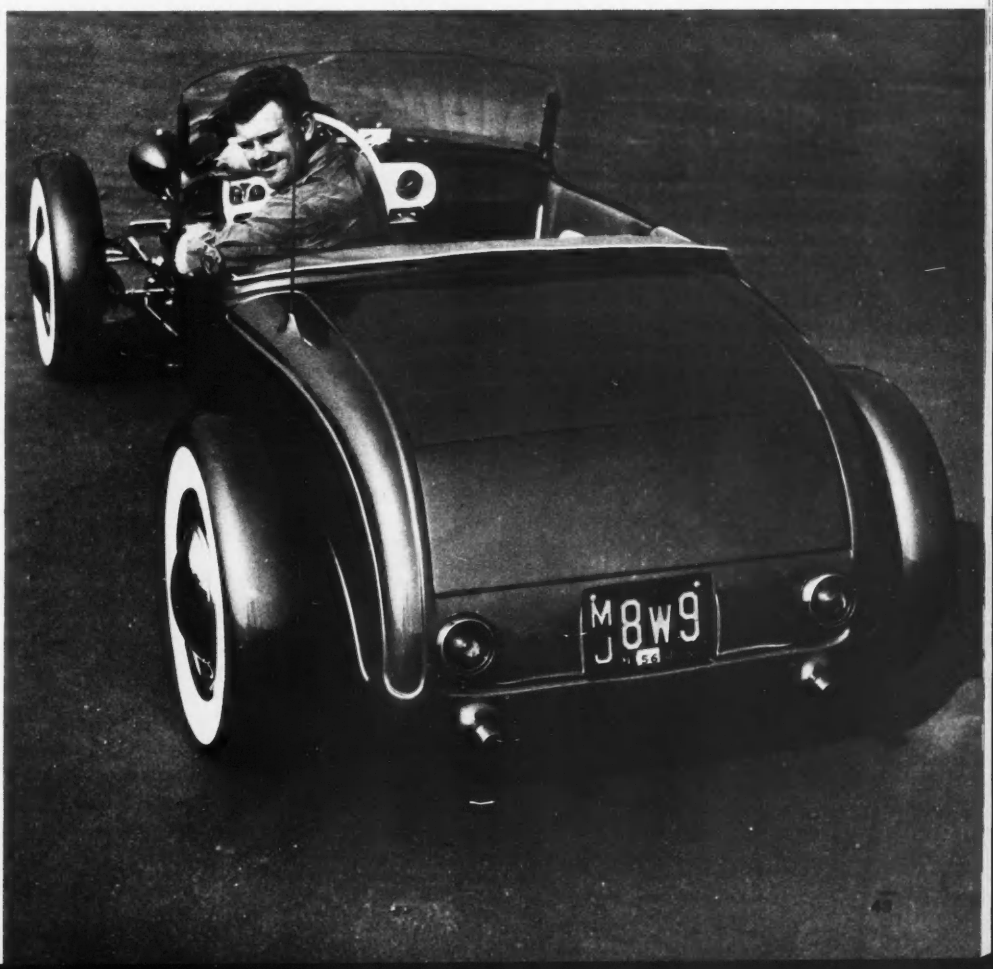


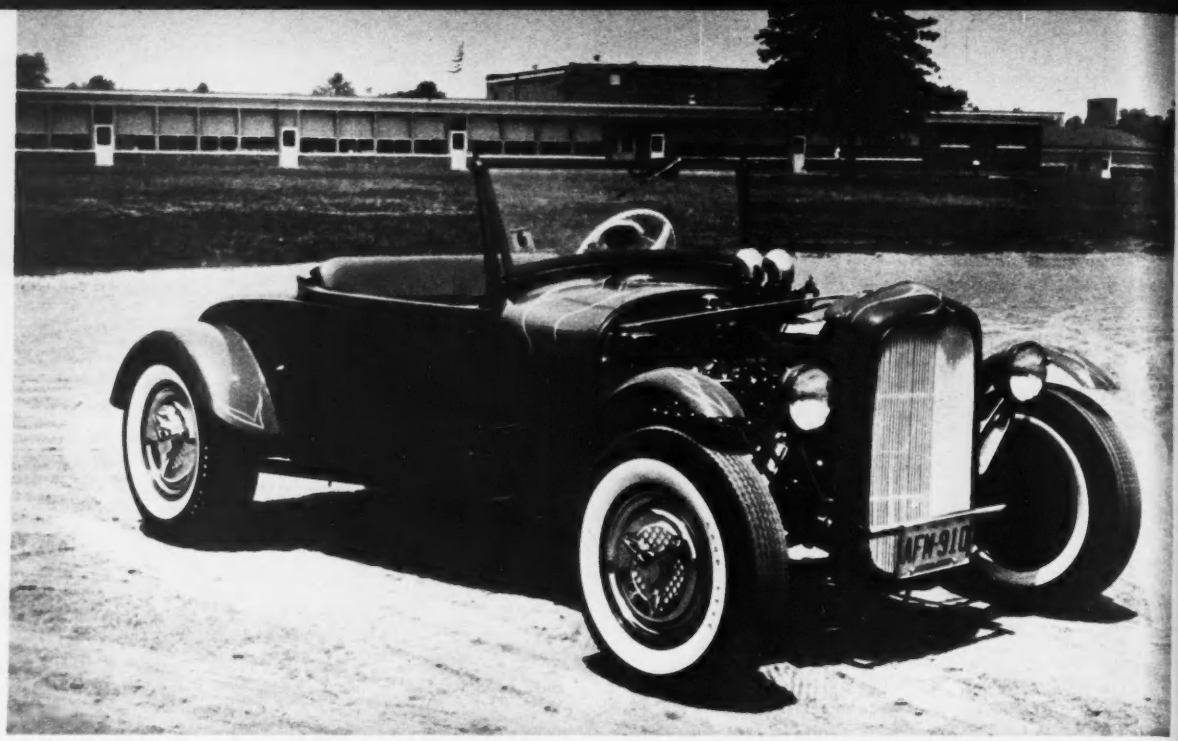
Jack originally spent eighteen months to build car, but is continually adding to rod's details. Note frenched door hinges, smooth appearance of body. The transmission is '40 Ford and drives a stock '32 rear end. Twin master cylinders on firewall are for '41 Ford hydraulic brakes and hydraulically operated clutch. All work done by Jack at his own body shop.

Far left. Body is unitized and welded to frame. Firewall is solid, molded to frame, as is grille mount, shock mount frame ends. Spring shock mount plate is used. Engine is '49 Merc bored .060 over with Harmon-Collins cam, and Edelbrock heads. Engine and front feature chrome goodies.

Beautiful interior was styled by Richmond Hill Auto Top, N. Y., in tan and white Naugahyde, brown rugs. Cowl was completely smoothed with windshield stop removed. The windshield is from late model car, special mount supported.

Right. The rear deck is filled except for a 14 inch section on the bottom, which is electrically operated from dash. Compartment houses spare tire, battery, tools. License plate is frenched in rear pan as is exhaust outlets. Taillights are '50 Pontiac. Aerial is molded in rear deck, wheel wells are paneled to hide original body construction.



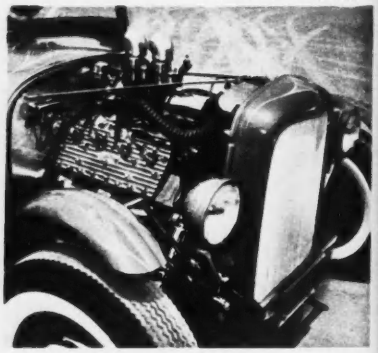


All work in this neat rod was done by Jack in 18 months in spare time at a cost of $1000. Body is channeled 8 inches over the "A" frame and '32 Ford grille is used up front. The paint is a wild '57 Olds Festival red lacquer, white striping.

STREET AND SHOW ROADSTERS

JACK DeMATTEIS
'28 Ford
Verowa, N. J.

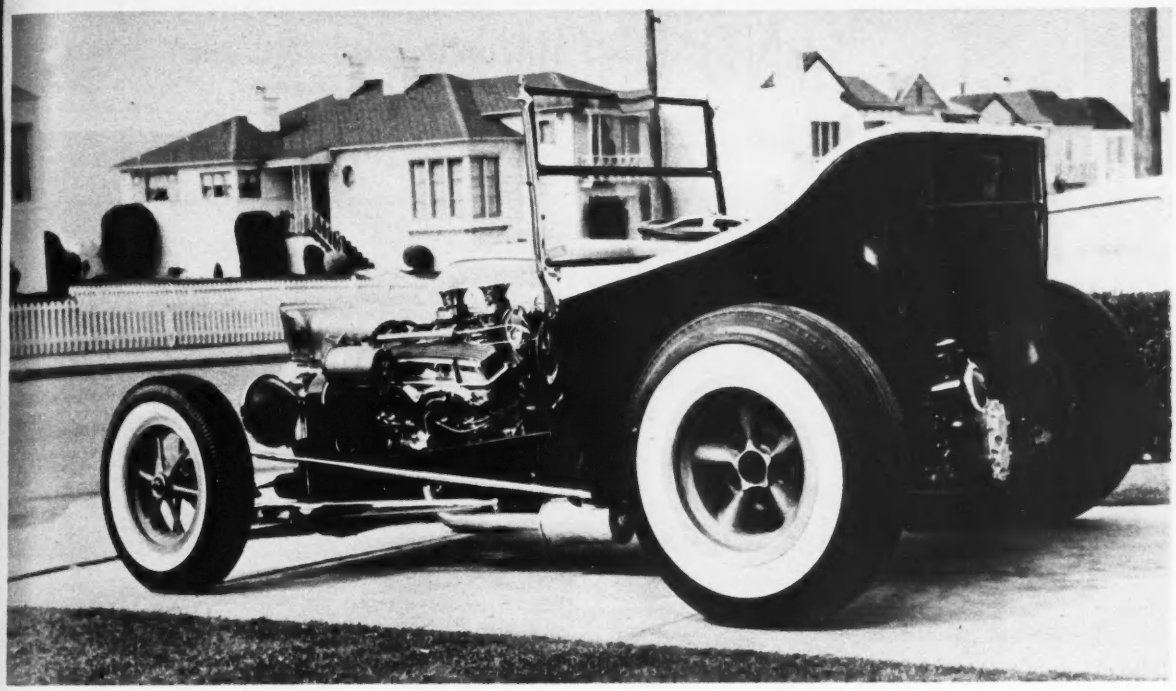
Photos by Woody Higgins



Rear fenders are raised on body and bobbed, while fronts are the cycle type and mounted directly to frame. Taillights are '59 Caddy with lenses shortened 2 inches. '39 Ford X member was installed to mount '39 transmission running 25 tooth Lincoln gears. Front end is '32 Ford and '34 Ford is used in rear with a 4:11 ratio.

Above right. Engine is '48 Merc bored and stroked to 276 cu. in. with oversize valves, Isky 400 cam, Jahns pistons, Edelbrock two pot manifold and 8½-1 heads.

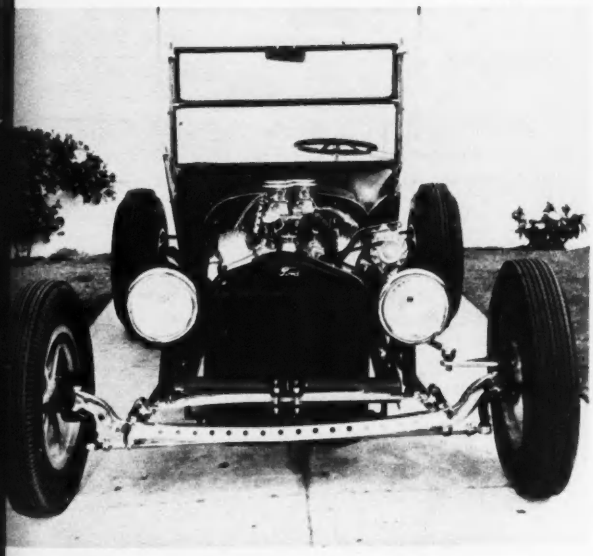
Interior is finshed off in red and white Naugahyde by Caldwell Auto Top, Caldwell, N. J. Shift lever and brake handle have been chromed, '58 Chevy steering wheel.



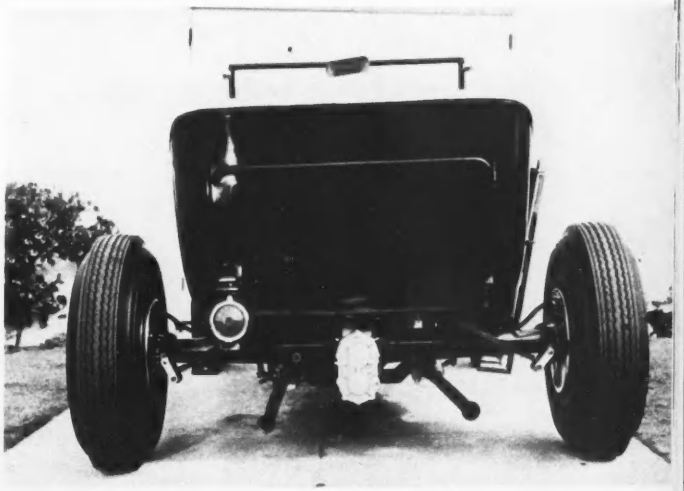
Real wild street rod uses fiberglass reproduction of the '24 Ford "T" bucket. Body is channeled 6 inches over '28 Ford frame with wheelbase of 83 inches and tread width front 59 inches and rear 60 inches. Mufflers are '60 Buick resonators.

JOHN SOMMERS
'24 Ford
San Francisco, Calif.

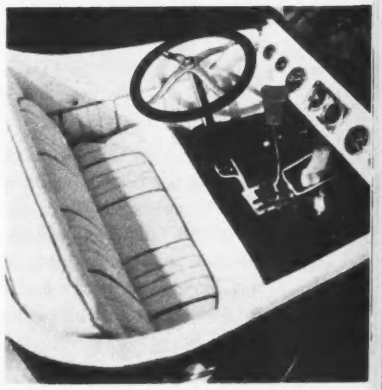
Photos by Bob Henderson



Mill is '59 Corvette bored to 301 cu. in. Tubular cross member mounts spring. Spring and axle are '34 Ford as is steering gear, while spindles are '48 Ford. Front wheel brakes are not run, this is not recommended. Paint is black lacquer.

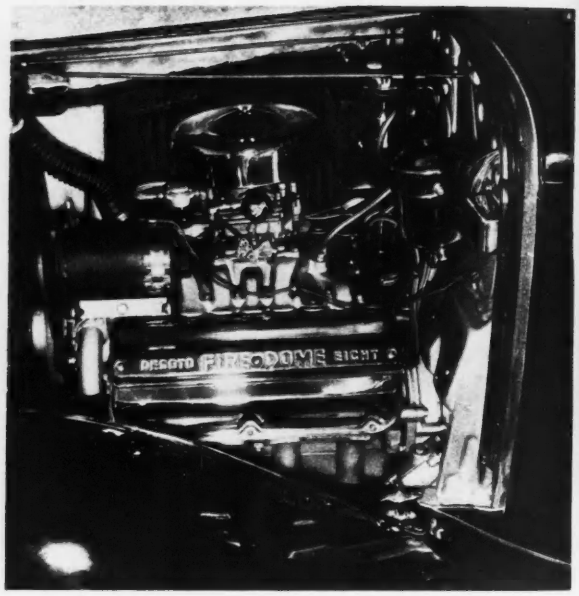


Model "A" spring is mounted to '48 Ford rear end running Halibrand quick change center section. Rear brakes are '48 Lincoln. The wheels are American Racing Magnesium mounting 5:50 x 15 tires in front, 8:00 x 15 rear. Shocks are Monroe tubes with 50-50 action. Taillight is "T" antique. Interior is white Naugahyde with padded dash mounting Stewart-Warner gauges. Note Moon pedal and shift plate for 4 s/box.



STREET AND SHOW ROADSTERS

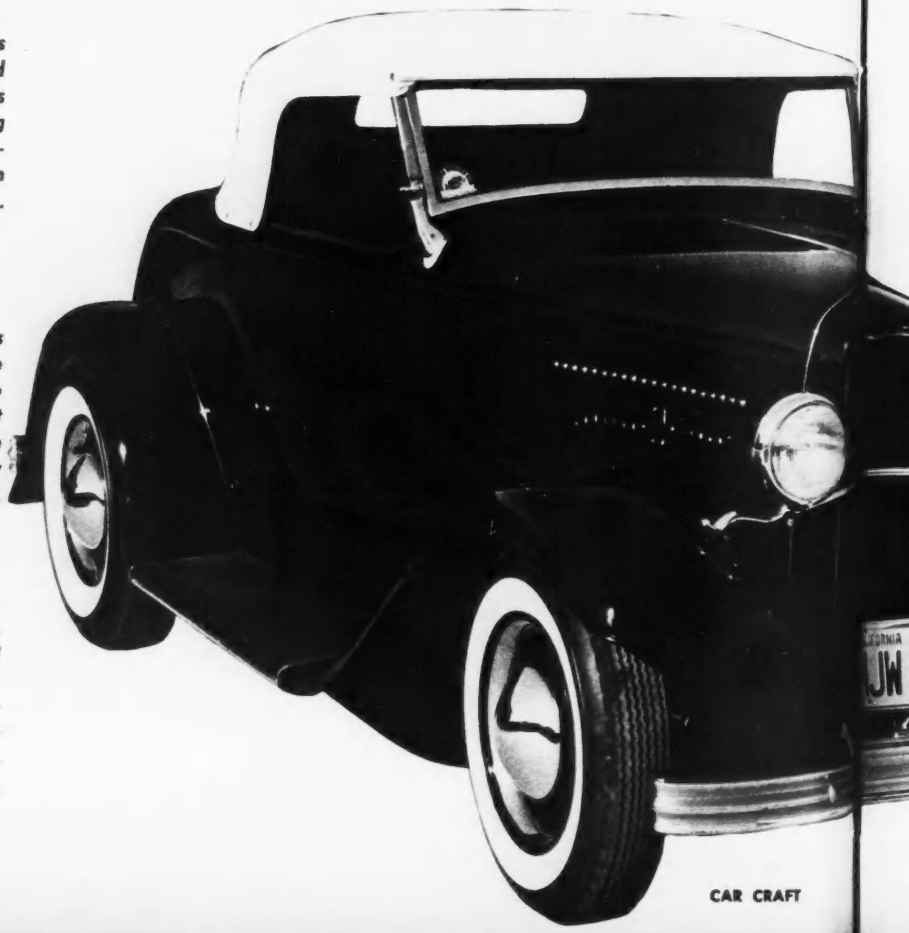
JOHN MALZAHN
'32 Ford
El Cajon, Calif.



Interior is smartly styled by Kaisers Top Shop in San Diego, Calif. Rolled and pleated maroon Naugahyde is used on seats and door panels. Rug is matching maroon. Separate bucket type seats are from an Austin Healey. Gauges are Stewart-Warner.

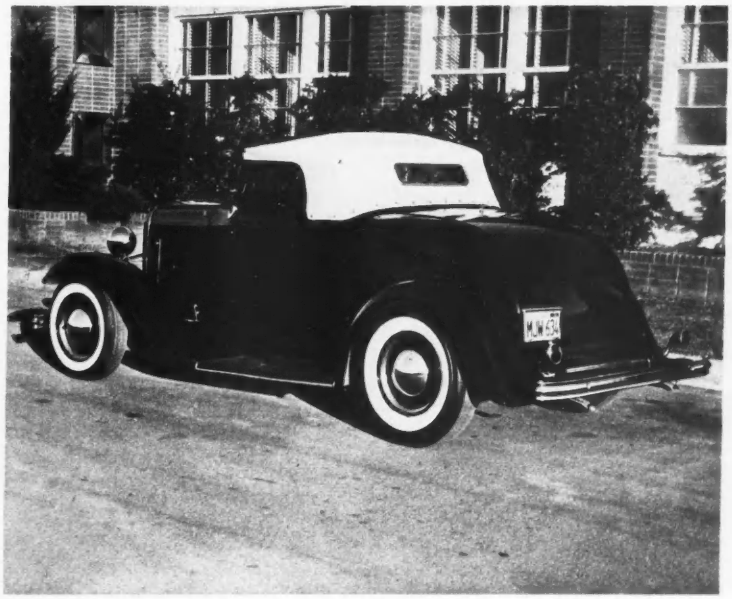
Engine is '55 DeSoto V8 which is stock, except for the many chrome goodies. Big V8 was tough job to shoehorn in little '32, still keep it looking stock. So watch it at the lights, this little charmer can really go. Note glass padding on hood.

Car is completely stock in appearance except for 15" wheels, dropped front axle, and filled grille shell. Cowl vent is also smoothed and body painted a beautiful jet black lacquer job. Emergency brake electrically operated instead of usual pull handle.

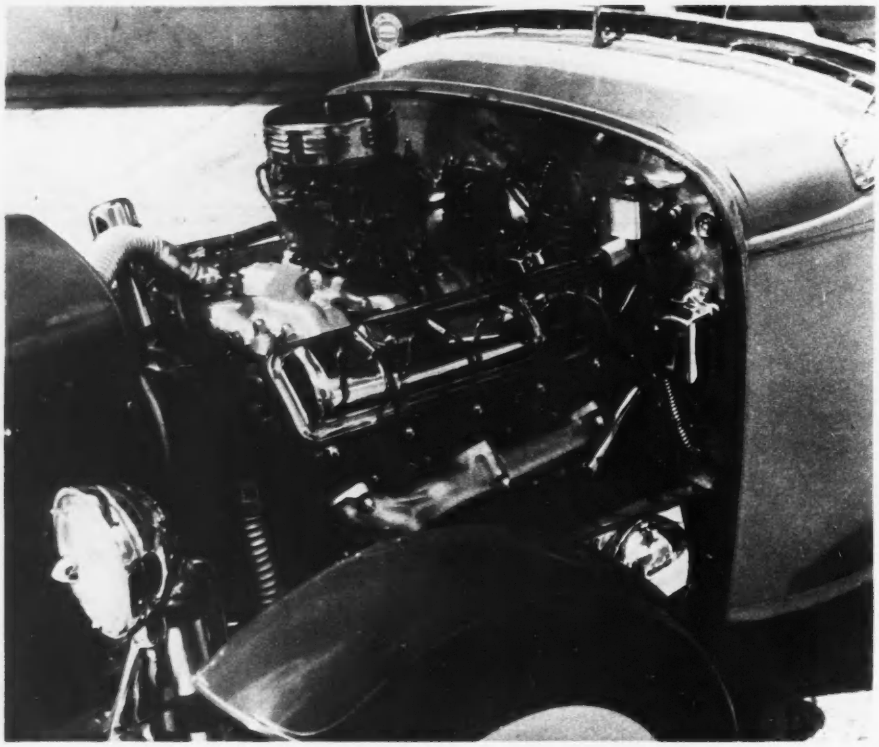


Photos by Bob Hardee

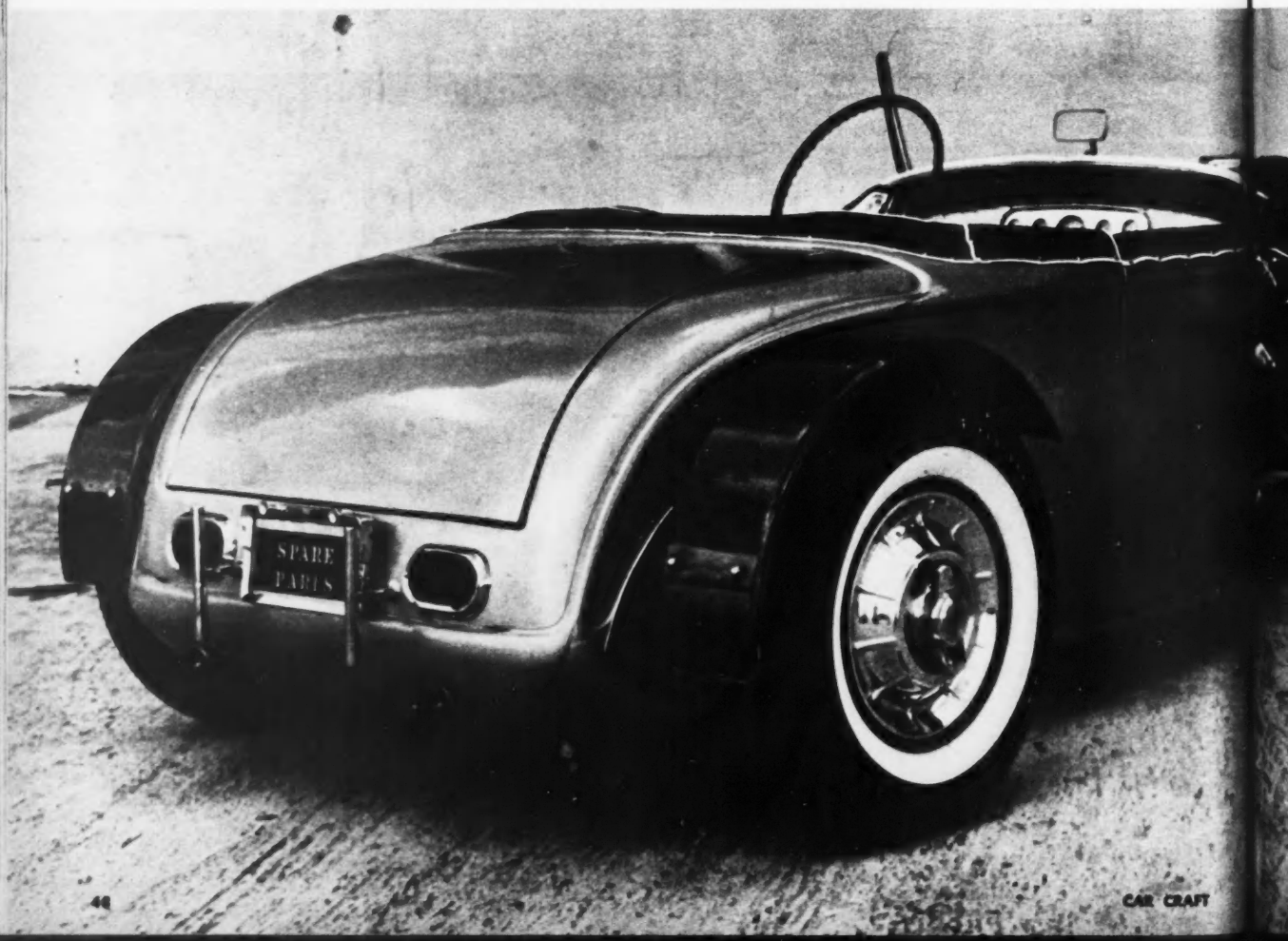
Above. White top and white wall tires contrast nicely with black paint along with many chromed original parts. DeSoto mill is mated to a '38 Ford trans with Lincoln gears via a 14 lb. '53 Plymouth flywheel and Ford clutch. Rear is stock '32 with 3:27 gear ratio.



The spare tire has been removed from the outside of body, and original tail and headlights are retained. Chromed tipped dual pipes just peak out from under rear bumper. Body work by Styler's Custom Shop, National City, Calif.



Engine is stock '52 Olds and features many chrome parts including the oil pan. Firewall is reworked and covered with an aluminum panel. Also note chrome panel covering frame rails. '32 Ford grille shell has been sectioned 6 inches, widened 4 inches and houses Jeep radiator for cooling. Jeep headlights are also used on special bracket. Right. Chrome expanded metal is used for grille covering and 2½ inch dropped axle is also chromed along with spring and backing plates. Popular spring shock mount is also used, and cycle type fenders run. Windshield and windshield posts are custom made. Tire size is 5:90 x 15 front and 7:60 x 15 run on rear.



Photos by Darryl Starbird

STREET AND SHOW ROADSTERS

JACK PAGE
'32 Ford
Ft. Lauderdale, Fla.

Trunk compartment has been nicely carpeted with tools, gas, water and fire extinguisher laid out. Taillights are custom made as are nerfs, exhaust pipes. Rear pan is rolled and molded to body, fender openings are covered.

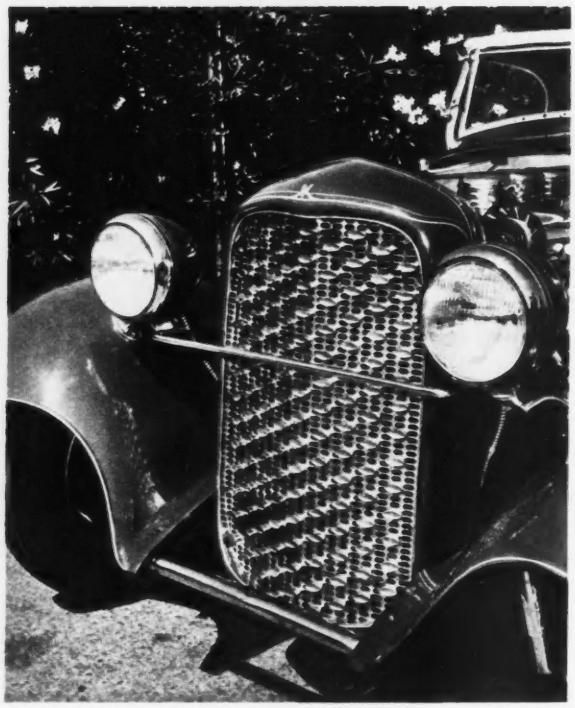
Left. '32 Ford body was originally a coupe and was neatly converted to roadster appearance. Body is channeled 8 inches over '32 rails Z'd 4 inches. Left hand door has been welded up and smoothed to body and body is completely welded to frame for unit construction. Paint is silver body with Old's Festival red lacquer fenders.

Interior features red & white rolled and pleated Naugahyde with red rugs. Chopped seats are buckets from a Hillman Minx. Dash uses expanded metal with Stewart-Warner instrument panel. Steering wheel and rear view mirror are from '59 Impala.

here's how:

the customizing rodders solve the hard-to-find deuce grille problem with current materials of round rod, expanded metal and decorative hardware

Photos by George Barris



THE ATTRACTIVE GRILLES gracing this page feature the artistry of George Barris, noted customizer and automotive stylist, and are samples of means available to restyle the renown '32 Ford, or more popularly known, "deuce" grille shell. Probably no other automobile has had one of its features pirated so often by other automobile owners as have the '32 Fords with their clean styled rectangular grille shell. The thin vertical bars as used in the stock grille shell seldom stand up under the wear and tear of the years and when they finally end with a conscientious hot-rodder after having adorned everything from "T's" to track roadsters, the grille centers are usually in need of replacement.

This is the problem facing these people, and frequently others who would like to see a change in the appearance of their already sharp looking grille, a change that will conform with the clean lines, be one of a kind and most of all, be one that can be done at home with little outlay of cash.

The initial steps to take in these directions are clearly depicted on the following page. Removal of the stock grille bar assembly preceeds cutting out the small lower pan at the base of the grille shell. This is the pan behind the grille bars which the crank goes through, not the lower edge of the grille. Makeup of the grille insert from strap iron is the next step to take, and will suffice for any and all grille assemblies that may find their way into your shell.

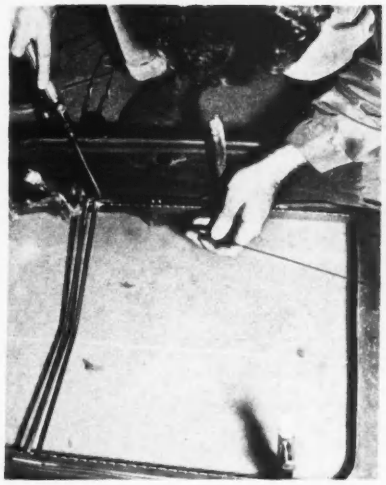
The selection of a custom grille center should not be too difficult, though the choice is as wide as with any grille cavity. You can choose horizontal bars as illustrated here or even vertical ones similar to the "stocker". When it comes to expanded metal the field of "grille Glamour" is quite extensive. Expanded metals, or steel mesh, is available in a wide assortment of patterns, enough to suit all tastes, and may be used as is following a plating job, or decorated with plastic trim or hardware as shown here. The results of such treatment, if carried out with care, can be very pleasing, bringing attention not only to your rod with its classic "deuce" grille shell, but to your own ingenuity in designing and building your car's grille piece.

1. Remove the stock grille, form new insert trim from 1/8" x 1 1/2" hot roll strap.

2. Try grille insert for fit, join loose ends by brazing, drill sides for mounting.

3. Bend 1/4" round rods to a slight "V" shape, these will be installed in grille.

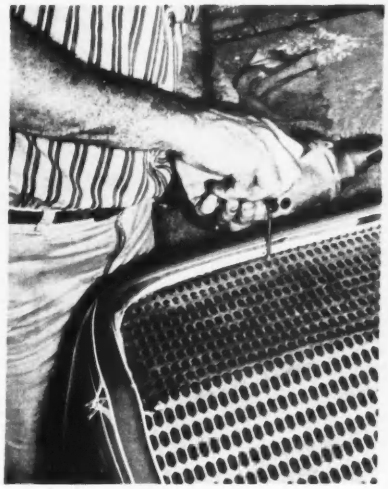
4. Notch grille insert for one bar, then measure spacing for 1/4" gap, continue.



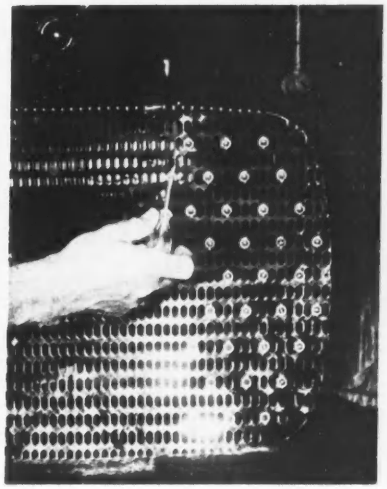
5. Using vise grips, clamp insert to the shell, braze-bars from inside with care.

6. Small rotary file should be used to clean up brazing between grille bars.

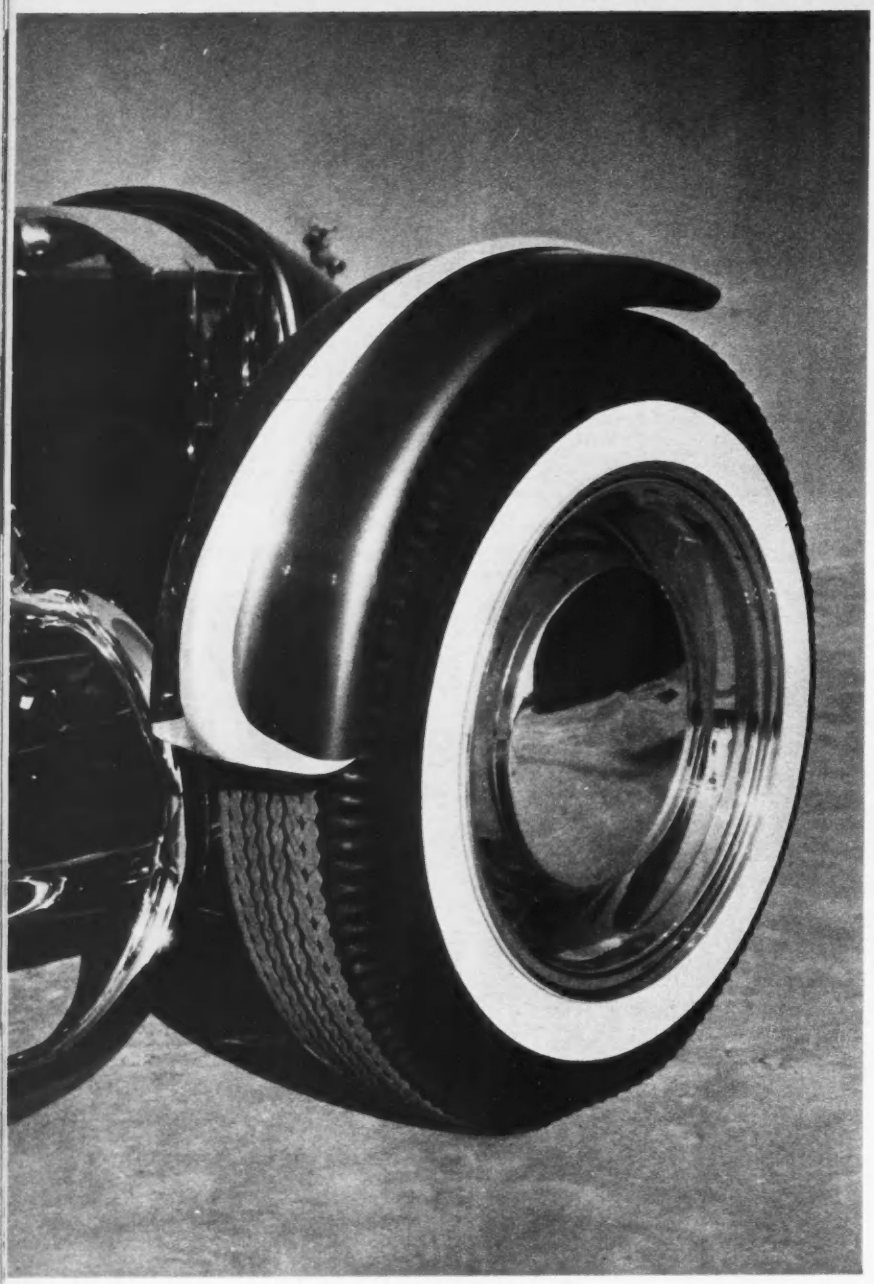
7. For a mesh grille center, transfer the shape of template to expand mesh.



8. Small angle brackets are used at each side to attach centerpiece to insert.



9. For added glitter, if unadorned mesh isn't quite the answer, install hardware.

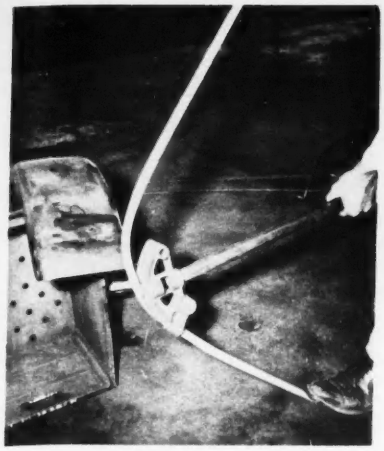


here's how:

IT'S THOSE LITTLE THINGS THAT ADD SO MUCH – LIKE THE ROADSTER FENDER WHEN FINNED FOR SHOW

IF YOU BELONG to the ever-growing group of early model roadster and coupe owners who are running cycle type fenders, then continue reading. This how-to-do-it deals with adding a finishing touch to what may otherwise be a plain, ungarnished curved panel. We will not dwell on how to add scoops or other "goodies" to your fenders, our intentions are to stay with the soft lines already present, to add just a bit more sparkle to your roadster or coupe's styling.

And there is nothing like a sleek-styled fin gracing the cycle fender on such a car to achieve that goal. Like other fine points in a car's design, fins could be out of place if they were allowed to take the spotlight away from the original body component, in this case the fenders. Large, sweeping units would not be the answer to giving your fenders that "extra touch", but small unobtrusive fins that follow the lines of the fenders and wheels, could be just the thing. If the styling were conservative, even a pair of fins could be added to each fender, one along each side, or both down the middle. Whatever you decide to do, be original and design your fins so they appear to be a part of the fender.



1. Cold rolled tubing, ¾" in this case, is shaped to desired fender fin design.

2. Mark off center line of fender, grind ends of tubing, align them along fender.

3. Braze sides of tubing to fender along forward end and rear, shape front tip.

4. Cut out paper templates for filler inserts to make up sides of fender fins.

5. Make up these fillers from 20 gauge cold roll metal and braze into position.

6. Grind brazed surfaces with a 24 closed coat disc, clean pits, tin area.

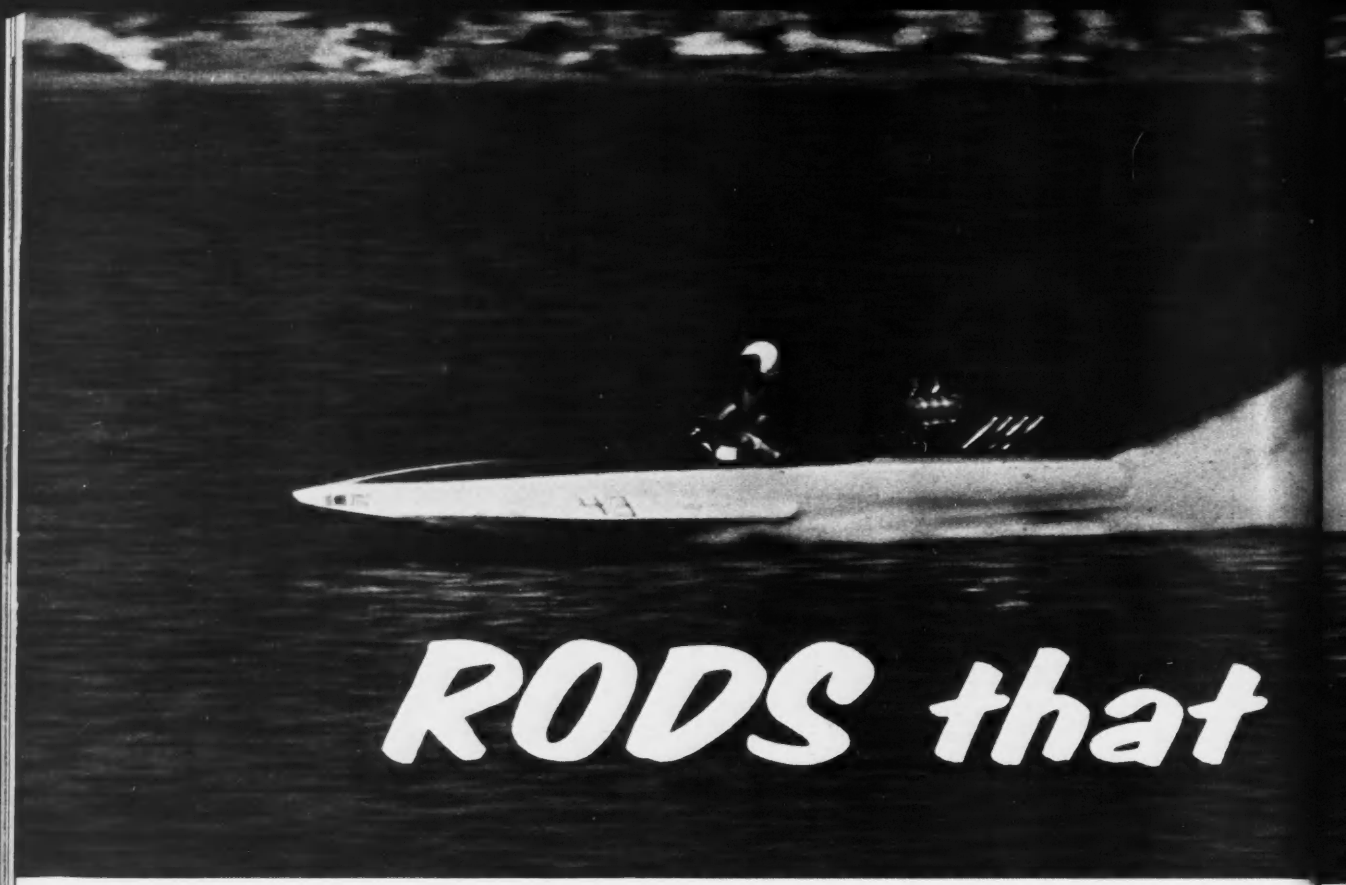
Photos by George Barris

7. Using torch heat, melt lead onto all brazed surfaces, sculpture with paddle.

8. Work leaded area over with curved vixen body file, roughing fins to shape.

9. Go over filed surface with fine curved disc, wet sand with #320 grit paper.

RODS that



White Mist, renown drag boat and former world record holder, leaves long rooster tail in its wake as it tops century mark.

THE THIRD ANNUAL REGATTA of Champions recently presented at the Long Beach, California Marine Stadium by J. C. Agajanian and the L. A. Boat and Ski Club gave the viewers a glimpse of what can be done in the glamour department as well as the hop-up field. Performance was the number one keynote in this event as it is in all races, and the inboards really turned on some dazzling speeds. Drag water skiers? Yes, they were there and moving right along too.

Drag boat racing is a fairly new sport having gotten its start only three short years ago in 1958. The top times then were in the 80 mph bracket. Many of these sea going hot rodders are ex-dry land rodders who have turned their attention to this exciting sport, which is probably the reason for its rapid advancement. Jack Pettijohn, the Phoenix, Arizona APBA quarter-mile drag boat champ broke his own official record of 121.65 mph for the standing quarter with a run of 125.62 mph. This is really moving on water!

Another hair-raising new sport just about two years old is drag water skiing. This is also done from a standing start for a quarter of a mile using one ski. Marjorie Lisonbee, a Queen City, Arizona housewife, world women's ski drag champion broke her own record with a run down the course at 76.79 mph., slightly more than 4 mph faster than her previous best. Butch Peterson of Los Angeles, holder of the world drag skiing title at 106 mph made a couple of slow runs at 90 mph, unable to top his present mark.

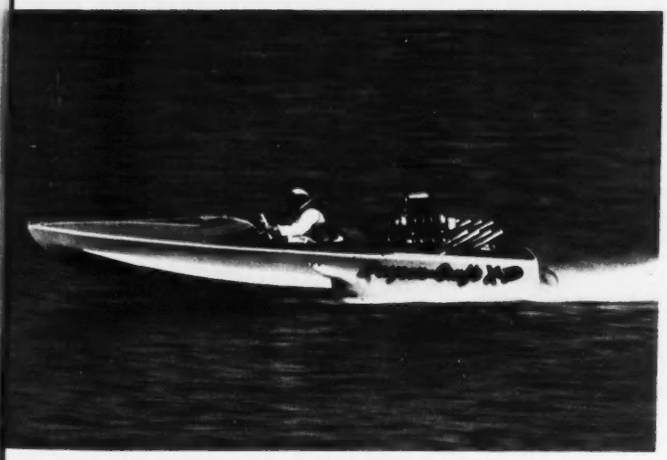
Boats run in classes much the same as any racing sport. The ski boats are designated by the letters SK and run in one class. Their engines are limited to 400 cubic inches and must be carbureted, blowers and injectors are not allowed, and only straight pump gas is legal. Drag boats on the other hand are allowed to go the whole route, blowers, injectors, fuel and cubic inches unlimited. A few of the builders have recently taken this last bit to heart. They are powering their boats with Allison aircraft engines, ala the unlimited hydroplanes. Mickey Thompson is working on a dual engined Pontiac drag boat that should really be a spray thrower.

(continued on next page)

Carl Dethlefsen of San Rafael, Calif., blasts by beach in his 16' Rayson-Craft ski racing runabout. Carbureted Chrysler mill allowed Carl to outdo Nat'l champ Ed Olsen in events.

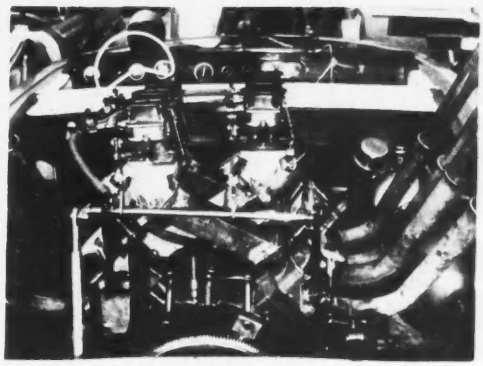
Seafaring hot rods is what they call 'em as they close the gap on the speed records set by their dry land brothers

go to Sea



Rayson-Craft X-P, experimental three-point drag hydro driven by Bob Ellis, placed 2nd in unlimited drag heat. Turns in 120's.

Photos by Neumann, Lang, Brollier



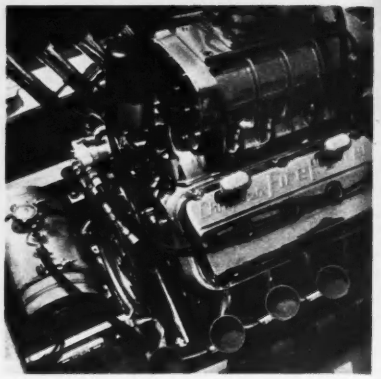
As in dry land hot rodding, some engine builders are always ready to try something new. Engine above, fitted with 6 carb logs on set of ram tubes.

Sanger hulled "White Mist" above is sleek 3-point drag hydro, designed for dragging. The hull rides level at speed, sponsons, prop riding in water.

Left. With a bow to match its name, the "Woodpecker", Don Burger's drag boat, turns quarter at near 120 mph on gas. Hull is by D & H Marine.

430 cu. in. Mercury Marauder powers this clean Rayson-Craft hulled ski-boat. Engine has received full treatment outside of blower route, is by Keith Black.

Cockpit area of the Burger "Woodpecker" drag boat is painted candy red Metal Flake. Mechs, Jerry Morek and Art Chrisman, well known rodders.



Familiar Chrysler engine provides punch for this boat. Chrome, polished blower, injector, manifold add glamour. Mag is protected from water by plastic cap.

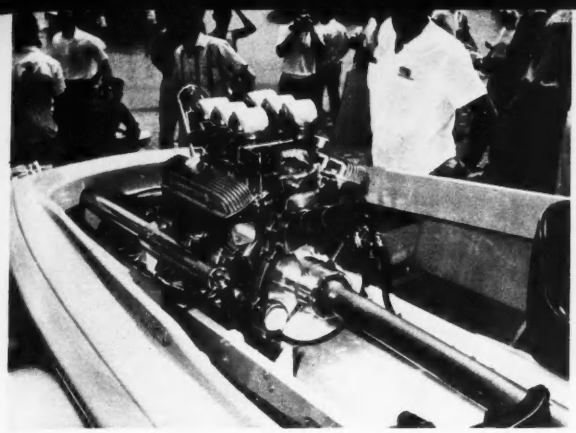
RODS THAT GO TO SEA

On the other side of the ledger you will find surface finishes, interiors and engine compartments to rival any found in the automotive world. Don Burgers renown "Woodpecker" features the latest paint craze, Metal Flake, in a dazzling Candy Red, providing a beautiful accent against the natural wood finish of the hull. Instruments used in the boats are the same as used in most rods, the plain race styled units by Stewart-Warner.

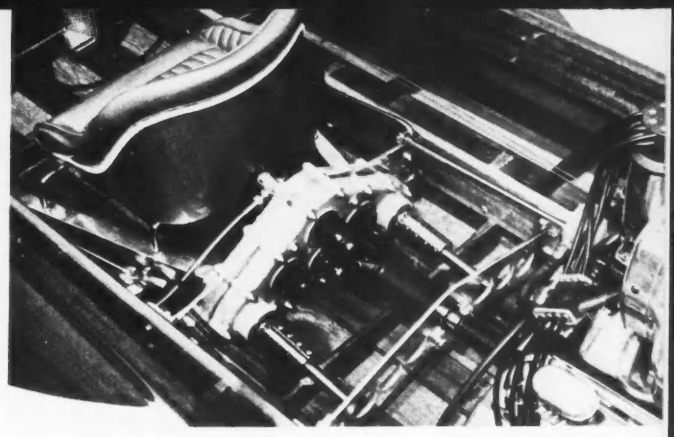
As for interiors, bucket seats seem to have a precedence over the larger variety, though both styles were fitted with sharp upholstery jobs. Pleats, rolls, buttons, you name it, the boaters have it. One thing is very evident to any hot rodder or custom fan when the boats as a whole are analyzed. Only infrequently will you find one with a worn upholstery job or dirty engine compartment. These boys keep their machinery spic and span all the time.

Polished aluminum and chrome work abounds on all of the engines and related gear. So much that an engine that doesn't have polished or chromed valve covers seems out of place. Adding this touch of beauty to the 600 plus horsepower that lurks beneath this outer skin is a way of showing pride in workmanship, and ownership, something that is quite common amongst the car owners of today. Mostly powered by automobile engines and fitted with like accessories the water hot rodders only naturally rework their engines in the same manner, but as can be seen from the photographs, they really do it in style.

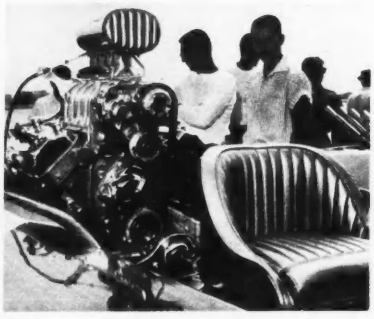
Action is keynote when ski racing runabouts compete. Carl Dethlefsen, second from right, won main event in "Honker".



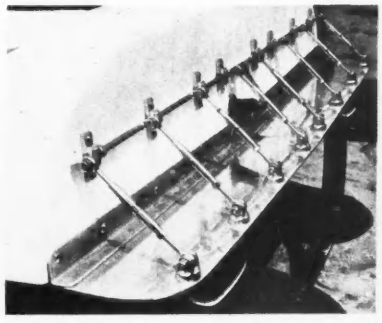
Doug Fowler is proud owner of "Torrid Turtle", powered by big Cad. Lou Brummet, builder, chose Mandella hull.



Custom-made V-drive to twin screws is one of special bits of well-known "white Mist" drag boat. Power by Chrysler.

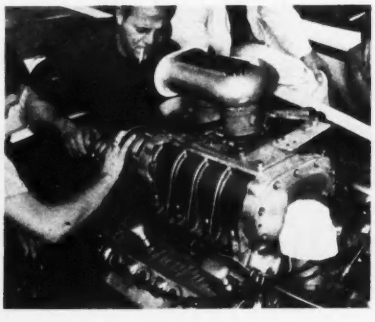


Like we stated, lots of chrome, polish, glistening hulls that look like mirrors, and plush upholstery jobs are the route to go, whether it be autos or boats.

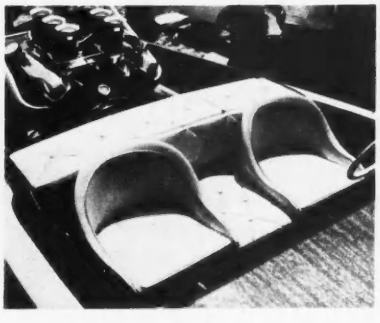


Chromed cavitation plate at rear of boat helps to stabilize them during fast acceleration. In rodders lingo, they help prevent what we call wheelstands.

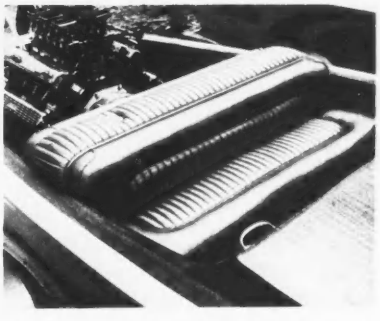
The Torrid Turtle's interior is about as immaculate as they come. Driveline is in Metal Flake paint, contrasts with hull. Water ski observer sits on starboard.



Pit tuning is as essential in boat racing as it is in drag racing with automobiles. The disconnected drivelines allow the engines to be fired up while on beach.



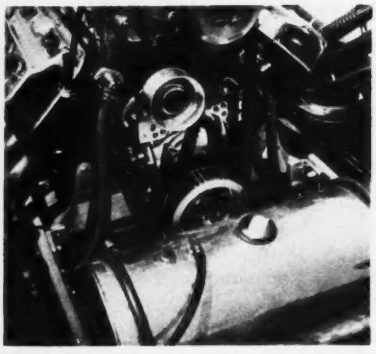
Matching bucket seats are upholstered in simple manner, add contrast to the diamond tufted divider, rear panels. Deck is mahogany finish, paint trimmed.

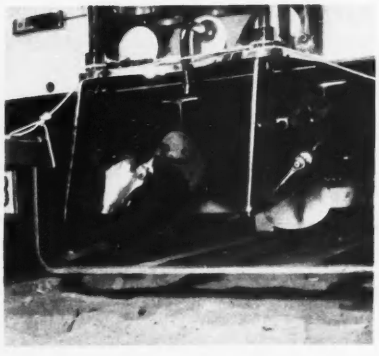


Cad powered ski boat outfitted in plush gold colored rolled, pleated Naugahyde. Inner bulkheads also upholstered.

Blown, injected fuel burning Chrysler in "White Mist" boat is mounted fore and aft so propeller shaft enters water at correct angle. Note lightening holes.

Twin screws, twin rudders are the main features of this crafts stern section. Rudders, mounting assembly are chromed.





THE PERENNIAL DEUCE AND T ROADSTERS RETURN AS FIBERGLASS MANUFACTURERS ANSWER THE RODDERS DEMANDS WITH THESE...

CLASSICS IN GLASS

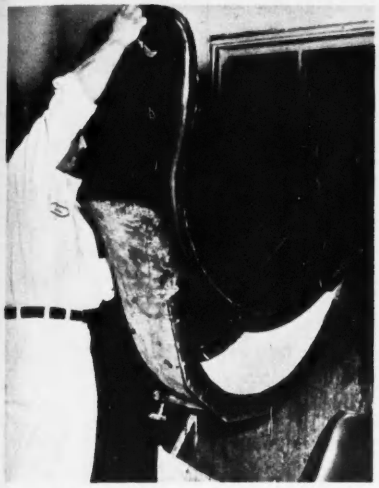
BEFORE HENRY BUILT his first roadster back in '03, there existed a score of hot-rodders determined to road-race stripped down versions of the family car. It was simple logic, cut down on the weight and up goes the speed. Then as time marched on the increasing populace demanded larger enclosed cars, or so Detroit claimed, and the once popular roadsters were dropped.

What Detroit didn't bargain with were the thousands who still desired to drive about in roadsters, restore them for the enjoyment received in doing so, and of late the many modern hot-rodders who wish to own a fine show or street rod, or run in the roadster classes at the drags. But time takes a lot out of these now hard-to-find bodies. Rust, accidents, and abuse have made the roadsters once so plentiful, quite hard to find, and when so, they usually demand a premium price. The most popular roadster models are generally a Ford product seeing as how Ford Motor Company turned them out in the thousands for quite a few years, and as I stated, these models are now on the wanted list.

During the past few years a number of firms engaged in the speed equipment and customizing business have sought to end this predicament, however, by turning out a variety of products and bodies on their own. One of the forerunners in the body field is Almquist Engineering in Milford, Pa. They manufacture one of the most popular roadsters ever in reinforced fiberglass, the '32 Ford. It would not be permissible for any small firm to attempt to re-construct this or any other roadster body of steel because of the cost, and if they did, the bodies would still be subject to inclement weather and rust.

Fiberglass, as used in many boats today, and similar to that used in Corvettes is the only answer. Not only does it resist rust, dents, and bad weather, it is as strong as metal bodies of similar weight. This strength factor allows the bodies to be made of less material, thereby keeping weight down to virtually nothing. Cost to the consumer is likewise lowered drastically when fiberglass is the main product in the body.

Most manufacturers making fiberglass bodies use one of two methods. First is the hand-layup method, where a thick blanket of fiberglass fibers known as matte is pre-cut to fit the mold, then thoroughly saturated with resin. This matte layer is covered with a layer of fiberglass cloth, woven similar to burlap, then the combined layers are squeezed to remove any air bubbles and to insure that the material is worked into all of the body lines and is smooth. The second method of making fiberglass bodies is by spraying them into a



Dee Wescott, Wescott's Auto Restyling, removes early model fender for Fords from one of countless number of molds.

Glass-Tee bodies are hand-laminated as shown here. Worker squeegees air bubbles from fiberglass matte, cloth.

Factory inventory at Wescott's includes practically all body panels and fenders for Fords from '28 thru '34, also '40.

mold. Special fiberglass guns containing a chopper and mixing head feed fiberglass rope into the chopper, then spraying it into a blast of catalyzed resin, the mixture of which is then applied to the mold in much the same fashion as paint. This method reduces the working time, and cost, required in making up a body, but unless the person making the bodies in this manner is thoroughly skilled in spraying fiberglass, there is reason to believe the panels will not be of even thickness throughout.

Contrary to a popular misconception, fiberglass bodies do not crack and fall apart in normal use if they are well constructed and mounted in a wise manner. Any automobile body, steel or otherwise, will come apart at the seams if it is not properly constructed or is mounted to the frame in a haphazard way. Bodies and fenders reproduced in fiberglass will stand up if they are of sufficient thickness to resist flexing vibration and are reinforced at strategic points in additional layers of matte, and are securely mounted at all points along the frame where stress or vibration is likely to occur.

The finish on any fiberglass product can only be as flawless as the original from which the mold was made. This means that if a mold is taken from a plaster or original body, any dents or marks present will show up in the reproductions. All of the manufacturers producing fiberglass parts today use what is termed "Gel-Coat" in their molds to give the bodies a colored finish. The "Gel-Coat" is sprayed into the mold prior to application of the fiberglass and is thus impregnated into the resin. Gel-coating, which is available in different colors, reduces chances of air bubbles in the surface of the body and gives it a very smooth surface. The only step necessary before painting the body once it is out of the mold is to sand it lightly to give the paint a good bonding surface.

The sole reason for going into the make-up of fiberglass bodies is to clarify a few points for the readers that I and many others have wondered about. If any of us are going to shell out some hard-earned cash for a car body, which usually means you are building from the ground up, it is only right that you know what

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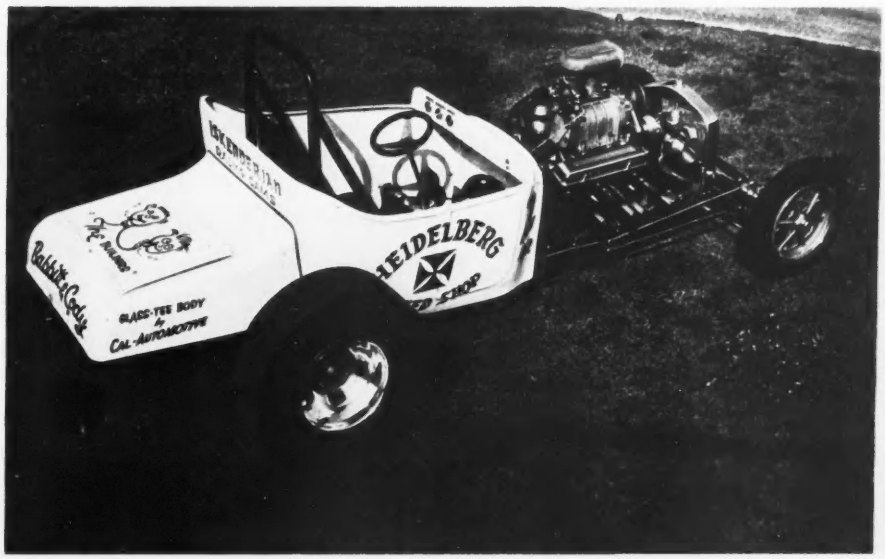
Photos by Pete Sukalac



One of latest drag roadsters to make an impression in the west coast racing circles is the T-32 roadster of Babbitt & Cody of San Bernardino, Calif. Their car is fitted with Cal Automotive's Glass-Tee body and rear deck. Weight of both units is about 48 lbs. 319" blown Chev has consistently turned in the high 140's, with low 10 sec. e.t.'s. Low weight means a lot in "A" roadster class when competition is mainly big cars.

Current NHRA A/R record holder is Harrell Engines Glass-Tee bodied roadster. "T" buckets have proven popular.

CLASSICS IN GLASS

Ever try this with a steel fender? Only fiberglass has this flexibility, strength.

you are getting into, and what you can expect from the body you buy.

The '32 roadster manufactured by Almquist Engineering known as the "Deuce-Rod", is hand-laminated fiberglass and based on the lines of the famed '32 Ford roadster. That is the door lines have been filled and the wheel wells in the side of the body and deck lid lines have also been filled in and a pair of large, projecting pods for "thru-type" exhaust pipes or vertical taillights have been added along with a square protrusion at the lower edge of the body. The results are a customized body ready made. A fiberglass dash is also included in the body, fitted up under the cowl, giving prospective owners a foundation for a permanent dash panel of their choosing.

Smooth sides have two advantages though. For competition use, or street, the rear end may be positioned in any likely spot without the wheels appearing out of place in relation to the wheel wells. The doors may be cut out so as to appear stock or in any shape the owner desires. If this route is taken, the body would have to be reinforced considerably and door jams 'glassed in the body. Also the doors themselves would have to be built up to the same thickness and latches and hinges installed. This applies to all fiberglass bodies.

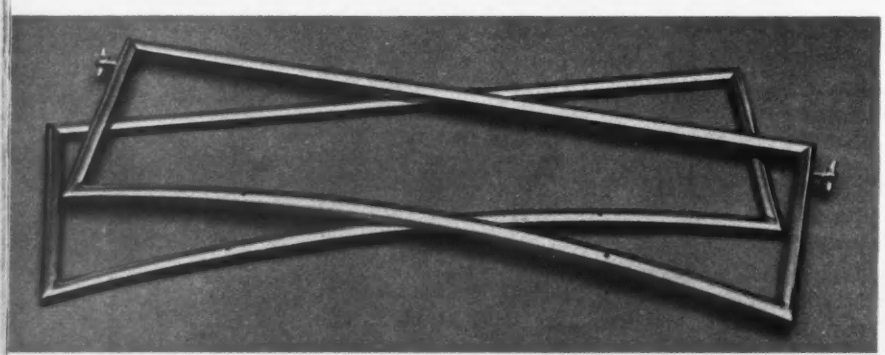
In addition to their "Deuce" body, Almquist offers as optional equipment a "deuce" windshield kit and a pre-nosed '32 grille shell. The windshield kit consists of a custom-fitted angle-iron frame, with moldings (less glass). The "deuce" grille shell is reproduced in fiberglass and is available for original radiators or others of similar size.

The Almquist "deuce" body, being a '32 roadster production, fits chassis with 100" or longer wheelbase and narrow frames such as pre-'32 Fords, etc., without modifications. Wider frames may be adapted to it or the body can be mounted on top.

Three thousand miles away from Milford, Pennsylvania, a very busy young man by the name of Dee Wescott, owner of Wescott's Auto Restyling in Boring, Oregon, is turning out an assortment of fenders, deck lids, frame horn covers, etc., for all model Fords from '28 to '34. Fenders for '35 to '41 Ford pickups are also in production. Dee got his start a number of years ago when he repeatedly had to pound out bent and ripped fenders or search in vain for the real thing. He eventually turned to fiberglass for an assortment of reasons. As with the body makers, Dee made his molds from new or perfect parts, guaranteeing that all reproductions will be precision fits. The fenders may be easily modified (bobbed) and come without holes allowing the new owners to mount any light they wish.

These parts require no extensive sanding nor filling and can be painted like original metal, and of course they will not rust or dent. Wescott's fenders for Fords are probably just as much if not more so in demand as fiberglass bodies since many hot-rodders in by-gone days scrapped their fenders or engaged them in one too many accidents. Grille shells, dash panels, running boards and gas tank covers for the '33 and '34 Fords are also available. This huge array of fiberglass parts not only means the shortage is ended but you can achieve a great weight reduction for competition use, especially if the body is fiberglass too. Sedans, roadsters, coupes, phaetons, and pickups, you name it, Wescott has precision engineered parts for it in fiberglass.

Another prominent roadster body manufacturer, this time on the west coast, is Cal Automotive, Inc. This growing firm has perhaps the largest selection of roadster bodies to offer the buying public, both in street and



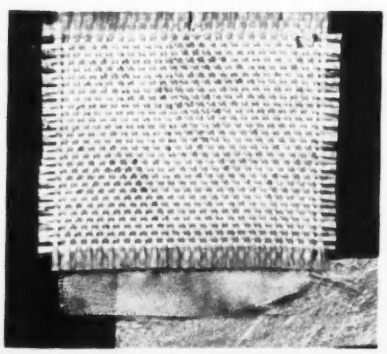
Left. Among many new reproduction parts found at Ford Parts & Supply Co. are complete stock of windshield frames for '23 to '26 Ford roadsters. Beauties are for Model A Fords. Features excellent chrome job, precision shape, fit.

Right. Sample patches of material used in fiberglass construction of roadster bodies is displayed. At bottom is matte, the main body material. At center fiberglass cloth is shown. Roving, often used for reinforcing is heavy, shown at top.

competition models. Their most popular unit to-date is the T-23 Glass-Tee roadster bucket, an exact reproduction of the '23-'25 era model "T" roadsters. This model has been in production for about 18 months now and it is reported that nearly 100 T-23's are in use or under construction. Another popular model produced by Cal Automotive is their T-27 Glass-Tee, an authentic '27 roadster with a full deck. Both of these models are available as heavy (light by steel standards) duty street models or lightweight competition models. The latest roadster to be completed is a '32 Austin built strictly for competition. This latter model is ideal for use in competition roadster classes at the drags or may be used as a gas roadster with addition of a suitable grille shell.

Cal Automotive products are all laminated of heavy-weave matte and reinforced with cloth. All models have extra reinforcing around the upper and lower edges of the bodies and at strategic points in the lightweight competition units. Both of the Glass-Tee street models feature fiberglass dashes and firewalls completely 'glassed in. The T-23 competition model has a built-in dash, but utilizes only a three inch firewall flange, allowing you to attach a metal firewall to the flange. The T-23 buckets have only one custom feature to them and that is the rear portion of the body rolls under to the extreme lower edge of the side walls, the small horns at the lower edge of the rear being removed. This rolled pan not only gives the body more strength, it adds to the roadster's looks when the body is run with only a fuel tank or small pickup box.

Each make of Cal Automotive body is reproduced from original steel bodies that received the treatment at top west coast custom shops to insure that every dent and wave



is removed from it before the molds are made. Every body line is retained, even those on the '23 roadster's doors. The '27 has lines at the door and deck lid positions though these are not operational in the fiberglass reproductions. The only custom feature on the T-27 is that the cowl vent has been removed. Wall thickness on the street models is nearly 1/8th inch thick while the reinforced edges are 5/32" thick. During demonstrations of the T-23's, 250 pound men have jumped up and down on the cowl of the street model repeatedly with no harmful effect whatsoever to the body. And the T-23 weighs only 35 pounds.

Other Cal Automotive products available for roadsters are fiberglass bucket seats, '23 radiator shells, '32 grille shells (both stock and filled), a '23 to '25 rear turtle deck and a '27 pickup box in a variety of sizes. The turtle decks feature an opening lid, thereby giving access to the rear compartment. The T-27 is also available with an opening deck lid at additional cost. They have a limited number of used windshield posts available to buyers of the two Glass-Tee roadster plus frames which are authentic reproductions.

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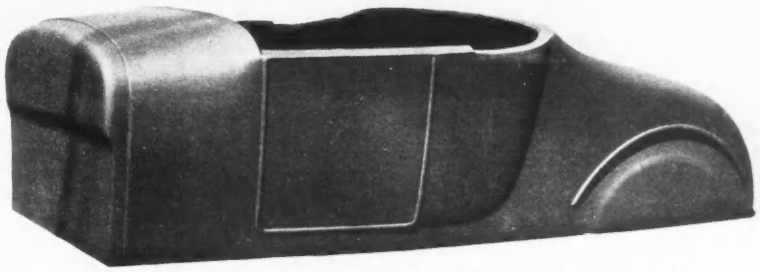
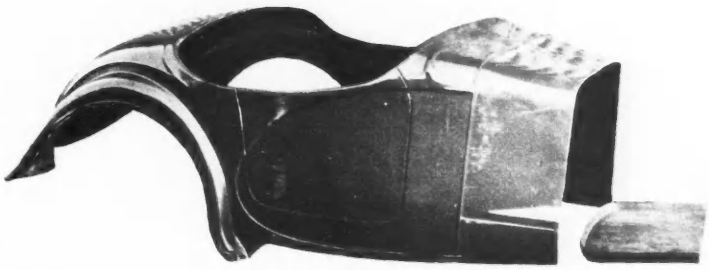


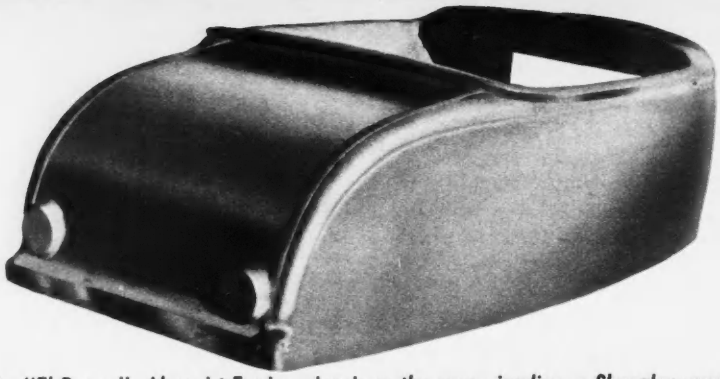
A recent addition to Cal Automotive line of fiberglass bodies is the T-27 Glass-Tee roadster, an authentic reproduction of the '27 Ford "T" roadster. Original body was restored to flawless finish, is in show condition, guarantee of high quality.



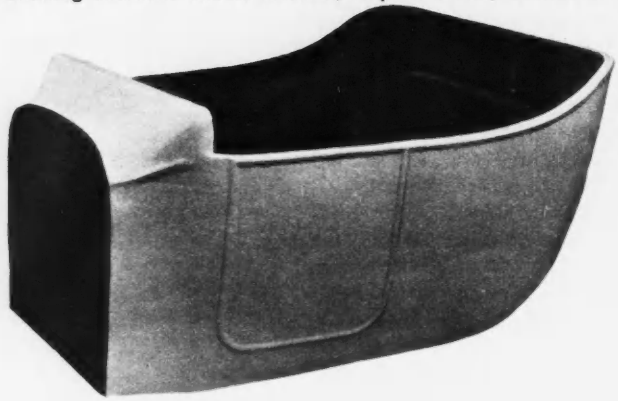
Lightweight '32 Austin body manufactured by Speedway Motors tips scales at 32 pounds, features bolt in fiberglass firewall. Stock hood covers long cowl extension. One layer of matte, cloth, for light weight construction, competition use at drags.

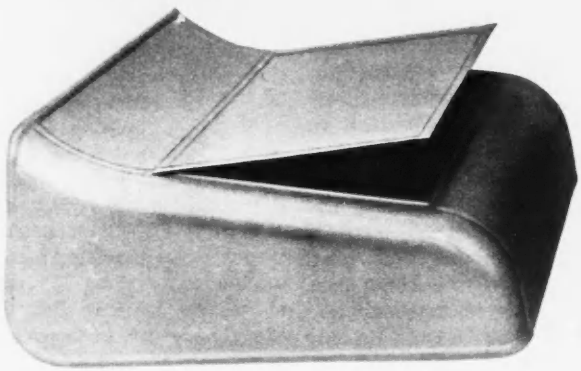
Same body style, different manufacturer. '32 Austin roadster Cal Automotive features normally exposed cowl, integral firewall reinforcement at strategic points for guaranteed 'togetherness'. Body is choice for both competition, gas roadster.

CLASSICS IN GLASS



The "El Deuce", Almquist Engineering is as the name implies, a fiberglass replica of Henry's famed '32 roadster. Popular model features taillight or exhaust pods at rear of body, square rear pan, no door or deck lid lines. Likewise rear fender wells are filled, allowing owners to choose location, shape of doors, location of wheels.





Middle photo shows highly popular T-23 Glass-Tee roadster by Cal Automotive. Model features rolled rear pan, dash panel, full firewall in street models which weigh only 35 pounds. Lighter competition T-23 weighs 22 pounds. Steel firewall bolt to fiberglass neatly affording maximum safety. Directly above is Cal Auto's authentic rear turtle deck, with opening lid, for steel, 'glass bodies, '23-25.

Long known for being a major supplier of hard-to-get Ford parts, Ford Parts & Supply Company of Rosemead, California, are currently offering new windshield frames for Ford roadsters from 1923 to 1936. These are items that are really scarce today, and when found in an unrusted condition command a top dollar. Gene Scott, proprietor of Ford Parts & Supply has an abundant stock of the '23-'32 frames while the latter are made on order. These frames are available either unchromed or chromed. The "T" two piece windshields feature a rubber molding between the glasses, these too are available new.

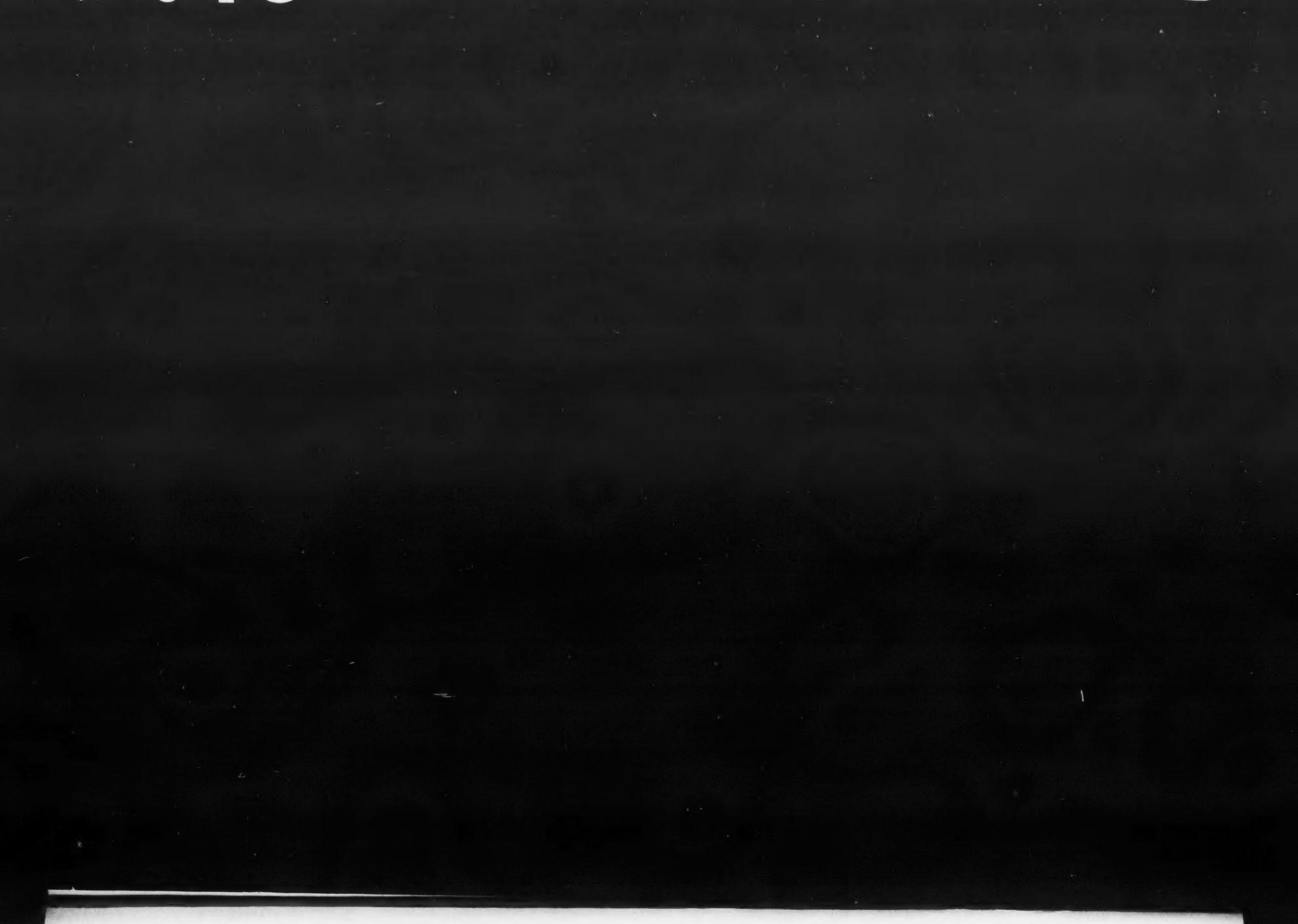
Not to stop here, Ford Parts & Supply also stock exact reproductions of the famed blue inlaid enamel Ford insignia as used on the '32 grille shells. Also Model "A" and '32 radiator caps machined in brass then chrome plated and wind-wing brackets for Model "A" roadsters from '29 to '31. New hubcaps add the finishing touch to those "A" through '34 wire wheels. In addition to these reproduction items, Scott has thousands of used items for just about every Ford manufactured. Among these are original windshield posts, fenders, radiators, and grille shells, both in new and used condition.

Located in the mid-west, Speedway Motors, Lincoln, Nebraska, have been turning out '27 "T" competition roadster bodies along with the popular '32 Austin competition roadster body for quite some time. Both bodies are lightweight specials strictly for competition use on the drag strip. The Speedway '27 "T" Iron Glass body weighs only 35 pounds ready to go, a big drop from the 200 plus pounds of a stock '27 body shell. It features a full rear deck and body lines with neither the doors or the deck lid opening.

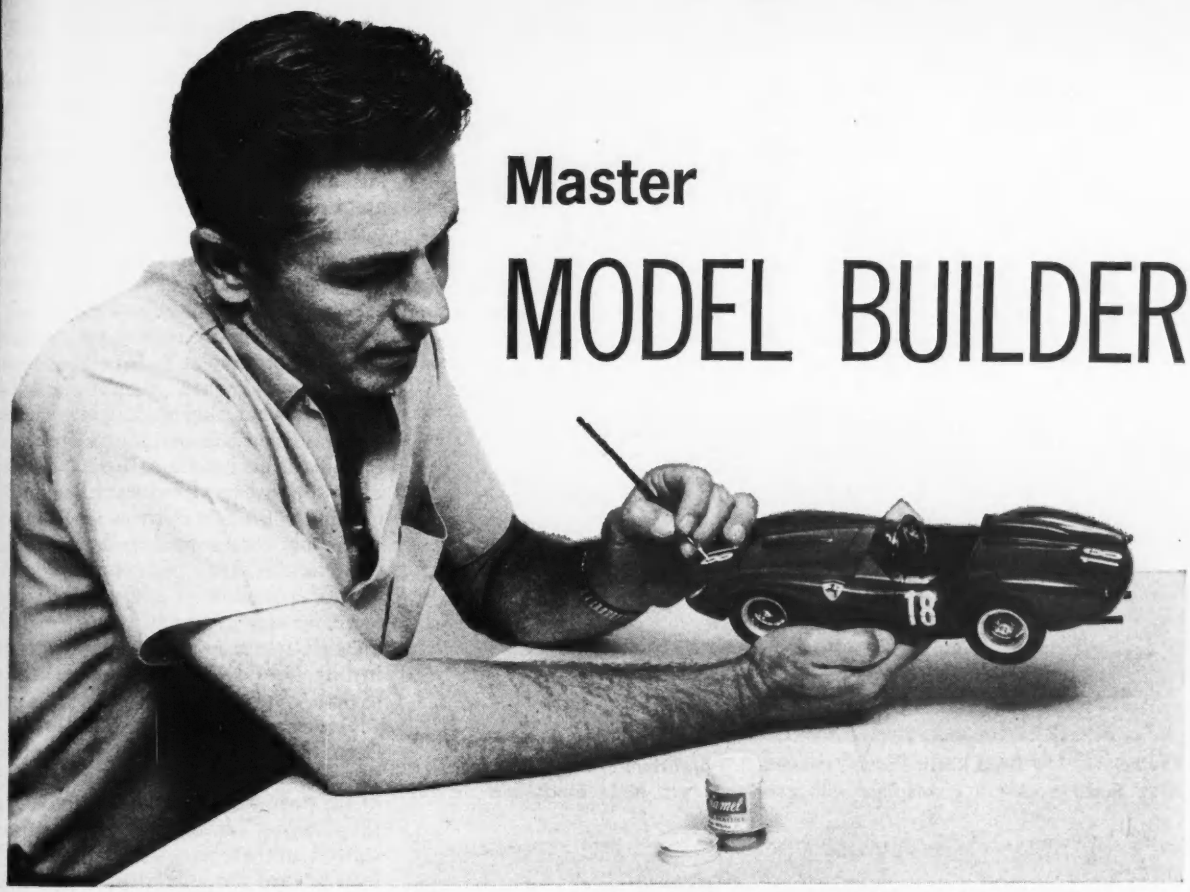
The '32 Austin roadster body weighs in at only 32 pounds and like the '27 Iron Glass body, is an exact reproduction of the almost extinct Austin. A fiberglass firewall is included with the Austin roadster allowing the owner to bolt or screw it to the body cowl. All body lines and the rear fenders have been retained. The outstanding feature of this type body is that the fenders are located at the extreme end of the body making it an ideal choice as a competition roadster. The wheel tread can be narrowed as in dragster classes and the tires tucked up inside the body without cutting it all up.

Both of the Speedway Motors bodies are hand-layups of a single layer of matte and a layer of cloth for additional strength.

This about wraps it up, and as you can see, quality reproductions in fiberglass roadster bodies and fenders along with other accessories has just about shattered the myth concerning hard-to-get roadster bodies and related parts. No longer can you say, "I'd like to have a roadster, but they are impossible to find."



Master MODEL BUILDER

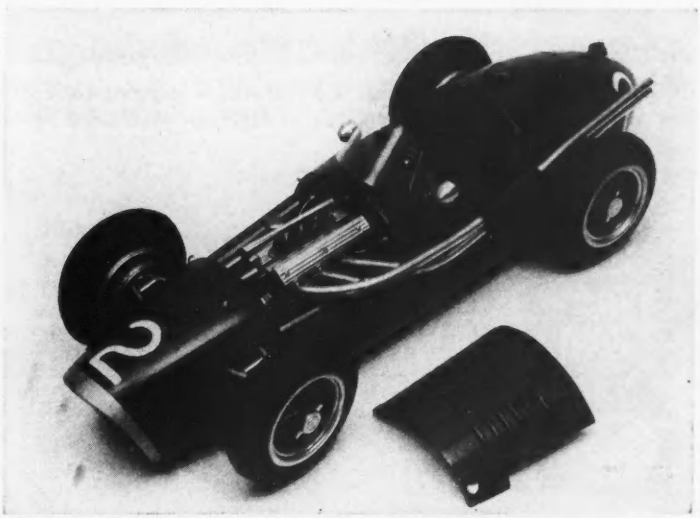


Bud Olson, Montebello, Calif., creates models so true to scale that when he appears with them, as in this shot of a Ferrari Testa Rossa, the feeling is not that of a normal-sized man with a model, but rather of a normal-sized car with a giant!

Few model craftsmen in the field have the distinction for one-of-a-kind creations as does Bud Olson. Simple materials — cardboard, spackle, buttons and hat pins — are but a few that do the trick in transforming his skilled models to authentic replicas.

IN A TEMPORARY but refreshing change from the popular hobby of modifying plastic models of contemporary cars to what we would like to have for our own custom dream boats, we would like to introduce a perfectionist-type master craftsman in the modelbuilding game—Bud Olson, of Montebello, California. Bud, a railroad conductor by trade, started building models years ago, and since then he has come up with miniatures of just about everything and anything that would lend itself to modeling, from airplanes and boats to his current love, automobiles. Where he differs from most of us is in his methods of construction – he's what's known as a "scratch builder." In other words, he starts with nothing and

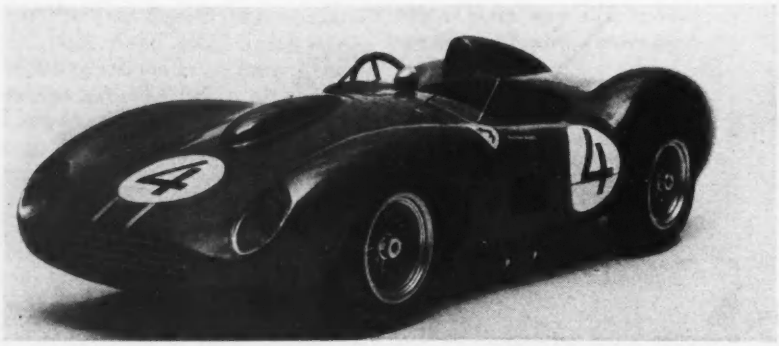
(CONTINUED ON THE FOLLOWING PAGE)



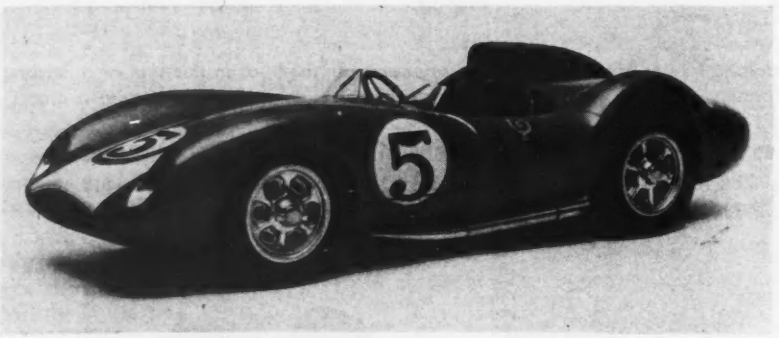
'55 Maserati 250/F1 Grand Prix machine is complete with double overhead cam engine, removable hood, exhaust guard and hinged fuel caps!

Bud's replica of a 4.9-litre Ferrari V-12 sports roadster is exact in every detail (of course!), sports red paint job set off with silver (aluminum) below centerline.

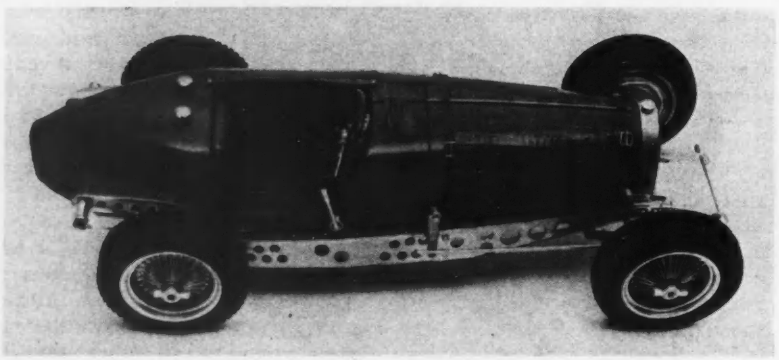
Photos by Pat Brollier & Randy Holt



Another TR/250 Testa Rossa Ferrari, this one has a glistening blue paint job. Like all of Bud's models, it's complete with gear shift, etc. Note windshield wipers.



Reventlow's famous Chevy-powered Scarab, the first American sports car competition seen in Europe since the Cunninghams, is faithfully reproduced here.



A real cutie, this '34 Type 59 Bugatti was built to a customer's order, to duplicate the real one he owns. Perfect miniature features a frame fashioned from brass.

Master Modelbuilder

winds up with – well, take a look at the accompanying photographs!

Using nothing more than scraps of wood and metal, some plaster spackle, a few buttons and pins and a great deal of time and labor, Bud breathes life into perfect little replicas of existing machinery. Through the years, he has gained a lot of experience in building these treasures, until his present work, when seen in photographs, defies all but the top experts when they're asked whether what they're looking at is the real thing or a miniature. For the most part, his machines are modeled after sports cars, from antiques and classics to the big Ferraris and Maseratis that roar around today's sports car circuits. He's also built some beautiful models of several Indianapolis racers, which were good enough to rate several display spaces in the Speedway Museum at the famous track.

Occasionally Bud likes to deviate from his perfect portrayals, and so he sometimes comes up with a design of his own, similar in basic theme to the "wayout" customs that we know so well on these pages. Bud's customs lean toward the sports car type, but they're all his. The lines of these little Olson-designed machines are usually so good that the overall appearance makes one want to remember where he's seen it before – it's too good to have been passed up by Pininfarina, Vignale or one of the other Italian coachbuilders who make the bodies for the high-priced and high-performing machines that are found on the roads and tracks of Europe.

Bud passes on his building methods for those of you who really feel ambitious, but warns that "the thing won't look like much until it's almost finished." When we asked if we might take a few shots of some of the construction stages of one of his current models, he stated that it might be better if we didn't since "the appearance of one of these little jobs before it's finished would probably discourage a lot of people from even starting!"

Bud starts by using two pieces of balsa wood, each cut to the size of the car. Fender shape and general profile are cut from these. They're sanded to the exact shape, and then glued together with small strips of balsa to form the width of the car.

Strips of cardboard are used to form the shape of the cockpit, front of car and grille. Balsa is then used for forming the deck and hood.

After the glue is dry, the model is covered with a mixture of spackle (the plaster-like material used to patch cracks in walls). After this sets for about 24 hours, the car is sanded, first with coarse sandpaper, gradually working into a fine grade of paper – 320A-400A is what Bud recommends. When a smooth finish is achieved, the car is covered with about three coats of primer, and again sanded with fine sandpaper.

The tires and wheels are made according to the type used on the original prototype – tires are cut from balsa, and a realistic rim inserted. Pins are used for wire spokes, and a grommet is used for the hub. The steering wheel is made from a brass curtain ring, using strips of tin for the center spokes, a chromed thumb tack for the center hub, and aluminum tubing for the steering post.

The seats are cut to the correct shape from balsa and cardboard, then painted with a dull lacquer to simulate leather. The dashboard is wood, stained to look like the prototype. Sometimes Bud uses cardboard in lieu of wood, but it still looks quite authentic, especially after he hand-paints each and every instrument in place, and adds the little switches and other controls found on the real thing.

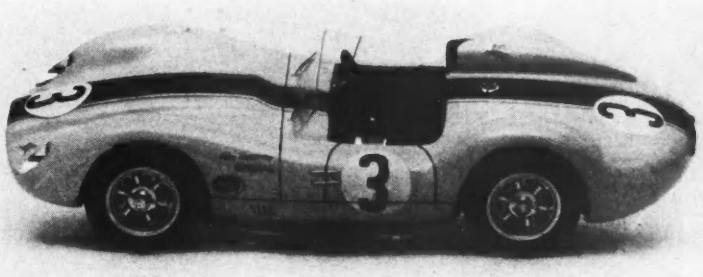
The exhaust pipes on Bud's miniatures are shaped from aluminum tubing, while gearshift levers are made from hat pins and small tubing. The drive shaft is usually balsa wood, and those realistic headlights are what used to be glass buttons, while the taillights are red jewels!

When Bud has worked out all these little details, the parts are all fitted, then disassembled for painting. The model is wet sanded for the first coat of lacquer, painted, and then allowed to dry for an hour. Then it's sanded again and the final coats of lacquer are applied. Bud usually uses eight or ten coats of lacquer, and they're all *brushed* on – the only time that he uses a spray is when a metallic finish is desired! Even an extremely close examination fails to disclose any brush marks – the sign of long experience and patience.

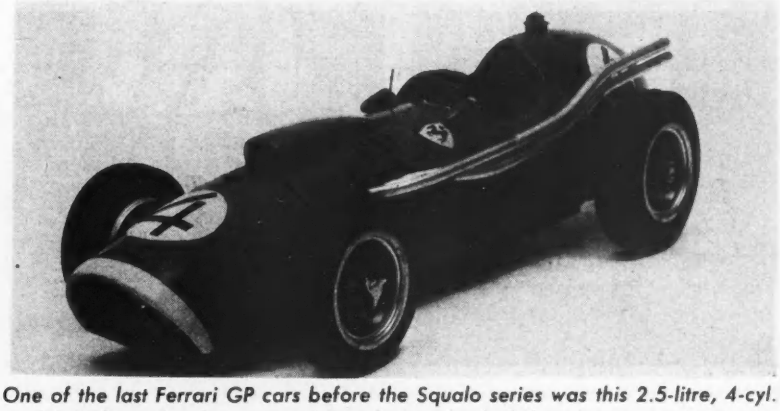
Bud puts on the finishing touches, lines and racing numbers, with a fine brush – no decals are used. The windshield is cut from heavy isinglass or celluloid, fitted in place, and then the rest of the car is assembled. Bud says, "That's all there is to it!"

To get the exact lines and shapes needed for a perfect replica, Bud collects photographs of the desired model, showing it from many angles. He really researches the car, and knows it intimately when he starts to build it. Because his reproductions are so faithful, many owners of fine machinery beat their way to his door to have him build models of their favorite machines. Bud figures that it takes him from two to three weeks to build a good one, and he won't let them go until they're perfect. For this, he usually gets from $120 to $135 for a model, depending on the detail and work involved. And many happy sports car owners now can look at their favorite mount without having to go out to the garage – it's right there on the mantelpiece!

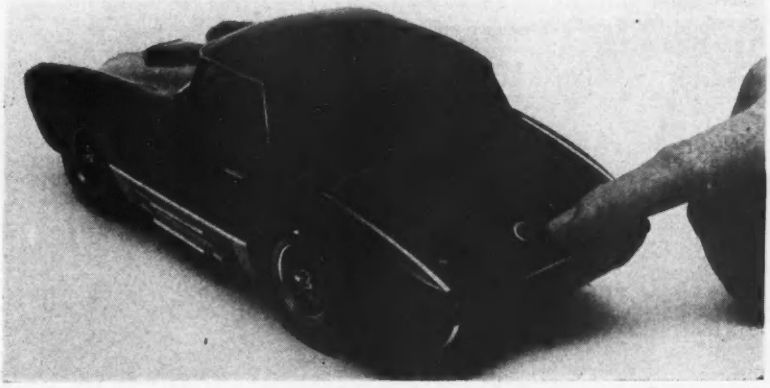
Bud lives at 820 South Maple, in Montebello, California. He would like to correspond with other serious modelbuilders, swapping ideas.



This one started out as a scaled-down copy of a Lister Jaguar, but Bud felt that he could improve on the car, and wound up with the "Fuel Injection Spl."



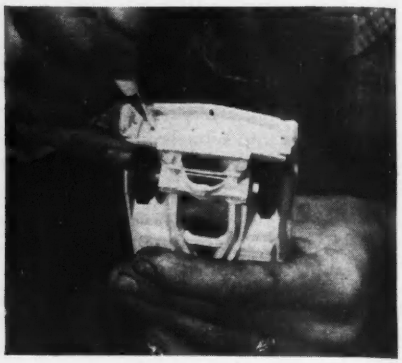
One of the last Ferrari GP cars before the Squalo series was this 2.5-litre, 4-cyl. model. Bud's replica features real, laced wire wheels, full engine compartment, etc.



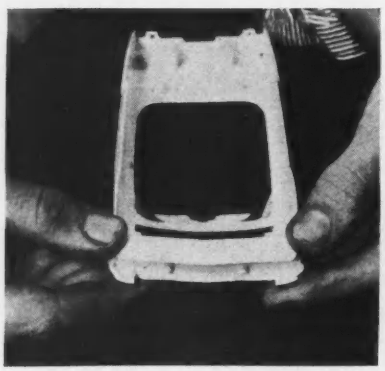
An Alfa Romeo sports coupe got the customizing treatment and a soft gray paint job, plus a fully-equipped interior with all controls. Note the gas cap on trunk.

HOW TO RESTYL

INSTALLING FLOATING HEADLIGHTS IN '61 FORD BY COMBINING BULLETS FROM '61 PONTIAC AND LUCAS LIGHTS FROM '61 FORD

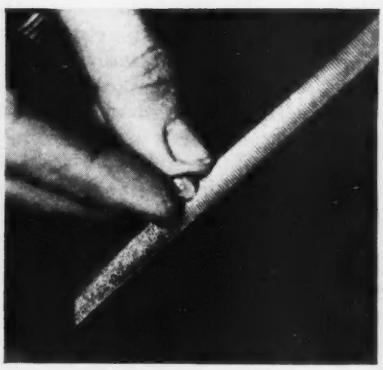


1. After obtaining the necessary parts mark off inner splash pan for location.



2. Next apply a small amount of glue to body and install rolled front pan unit.

3. To get more effect from floating lights file concave in side of fenders.



4. For strong attachment of lights, file a small flat on pointed end of bullet.

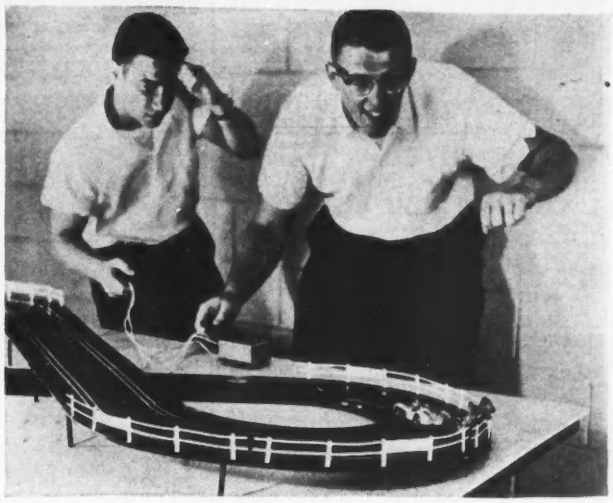
5. Next use a needle nose pliers and pull the point from the Ford headlight.

6. Glue points into the Pontiac bullets and then install the Lucas H.L. lenses.

7. Apply glue and hold in position until dry. Custom grille of own choosing.

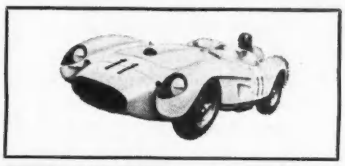
TABLE TOP RACING

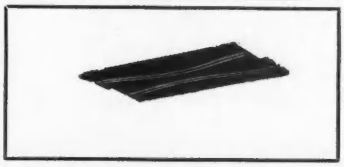
Miniature model road racing now adds excitement and action to scale models that you can build yourself.

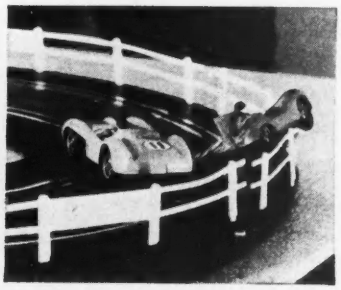


courtesy of Strombecker

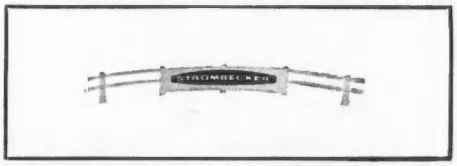
"Speed Kart" is for road racing on tabletop circuits. At right above, 1/32-scale Testa Rossa Ferrari, one of the many well-designed sports cars available from Strombecker. At right, a tabletop track section which provides a chicane.

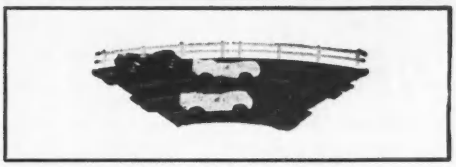




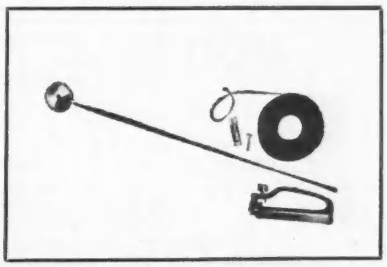


At left, the basic layout is quite adequate for racing two cars, and may be added to from time to time to increase the size of the track. Above, tabletop racing has all the thrills of the real thing.



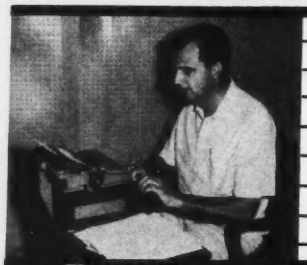


Top to bottom: England's D-Jag is a natural for Strombecker layout. Retaining fences keep cars from getting too far out of hand. Maserati Grand Prix car is another machine available for the tabletop circuit. Additional track sections are available to duplicate real circuits.



Left to right, twin-circuit power pack, 2-piece curve track set and do-it-yourself track-maker kit for those who want to make their own designs for tracks that can't quite be reproduced by the ready-made track available. The sport of tabletop road racing is gaining in popularity.

WHAT'S YOUR PROBLEM?



By Don Francisco

WANTS TO GO MODIFIED

Dear Don:

Ever since I saw my first Modified Sportsman race I've been hot to build one of these little cars. Recently I have decided that my time and facilities don't make such a project practical if I must start from scratch. Does anyone make parts, such as frames, rear ends, front ends, etc., that can be bought, ready to go, for these cars?

— Brian LaBonge
Los Angeles, California

Scotty Fenn's Chassis Research Co., 323 East Beach St., Inglewood, Calif., manufactures a complete line of parts for modified sportsman cars. Scotty can supply anything from frames fabricated from tubular members to a complete car. He also has a frame kit that has all the necessary members cut to length and bent to shape but which the customer welds together. Because of the precision with which Scotty aligns the members in a frame when he does the fabricating I think it would be wise for the average car builder to buy his frame assembled rather than try to align its parts and weld them himself.

QUARTER SPEED CAM

Dear Don:

I recently saw an ad for a "double-lobe" camshaft for Chevy V8's. What is a double-lobe camshaft? How does it differ from a regular camshaft?

— Stanley Groder
Ft. Worth, Texas

The camshaft to which you refer is the invention of Bus Schaller, who lives in Turlock, Calif. Schaller's shaft differs from conventional camshafts that rotate at one-half crankshaft speed and have one lobe on each of their cams for each of the engine's valves by rotating at one-quarter crankshaft speed and having two lobes on each of its cams for each of the engine's valves. It's principal advantage over conventional half-speed shafts is its slow speed of rotation. This allows the valve lifters to follow the cams and their lobes much more closely than they do on a conventional shaft. The result is precise valve timing at all engine speeds, which allows the engine to deliver a greater horsepower output, and considerably higher engine speeds with the same valve springs before valve float occurs.

Schaller's double-lobe camshaft is a new development in the automotive field but I believe it has a terrific future that will include making camshafts as we know them today obsolete.

FULL FLOW FILTER

Dear Don:

My dad is going to buy a new four-cylinder Tempest. I told him he should order the optional full-flow oil filter on the car but he doesn't agree with me. He says the filter isn't worth what it costs to have it installed and to change the cartridge every few thousand miles.

From reading some of your articles I know you recommend full-flow filters. How can I convince my father he is making a mistake by not getting the filter?

— Ron Jansen
Reno, Nevada

An automobile engine will run just as well without a full-flow oil filter as it will with one but the chances are it won't run as long. The filters principal advantage is its ability to materially lengthen the life of an engine's bearings and their related surfaces. These include the crankshaft's main bearing journals and crankpins and the bearings that operate on them and the camshaft's bearing journals and their bearings in the cylinder block. Other friction surfaces in the engine also benefit but perhaps not to such a degree as these bearings.

The way a full-flow filter increases bearing life is by reducing the abrasive action of dirt, metal particles, and other hard foreign material in the oil on their surfaces. Material of this sort bridges the gap between a bearing and its journal that is provided for the oil and scratches the surfaces. This is the same sort of action that makes sandpaper so effective. As it continues, the bearing and journal metal are gradually worn away.

With a full-flow oil filter abrasive material is removed from the oil before it reaches the bearings. The oil is picked up by the pump, pushed through the filter, and into the passages that supply the bearings.

Past experiences with literally millions of automobiles has shown full-flow filters to be highly practical as engine savers. I would definitely recommend one of them to any new car purchaser.

ALTERNATOR ROUTE

Dear Don:

Are the new alternator generators Chrysler Corporation is now using as good as the car ads say they are? If they are so much better than an ordinary generator, would it be possible for me to install one of them on my '56 Ford?

— Norman Atwood
Albuquerque, New Mexico

Alternators have definite advantages not enjoyed by conventional automotive generators. One of these is their ability to deliver a current output at normal engine idle speeds. Another is the high maximum output they can be designed to deliver. A third is their long service life expectancy.

It should be possible to adapt one of Chrysler's alternators to any automotive engine by building a suitable mounting backet for it. A second consideration would be to provide the correct drive ratio between the engine's crankshaft and the alternator. A simpler method of installing an alternator would be to obtain one of the special units now being manufactured by most major automotive electrical equipment manufacturers. These are made for many standard passenger cars. The necessary equipment required for their installation is supplied with them.

There wouldn't be any advantage to installing an alternator in place of a conventional generator if the conventional unit were capable of maintaining the car's battery in a fully charged condition. But if the type of driving involved or some special electrical equipment on the car made it impossible for the conventional generator to keep the battery fully charged, an alternator could be the answer.

STRONG ENGINE NEEDS STRONG TRANS

Dear Don:

I have just bought a 1930 Ford five-window coupe. Some friends and I also bought a 1952 Oldsmobile Rocket mill which we want to install in the car. We want to keep the original 1930 Ford floor-shift transmission. What can we use for the clutch and pressure plate?

Would you recommend installing a Hydra-matic or trying to use some other transmission? If you recommend some other transmission, please give as many choices as possible because of our limited finances.

— Gary McClenahan
Readsville, Pa.

I definitely wouldn't recommend using the Model A transmission with an Olds engine. In the first place the installation would be difficult and in the second place the transmission's gears would probably end up on the street the first time you mashed on the accelerator.

The easiest transmission to install on the engine would be a Hydra-matic or an Olds synchromesh. This part of the job could be done with easily obtained stock parts. Then your problem would be adapting the car's driveshafted torque tube assembly to the transmission. Special kits for this purpose have been available from transmission specialty companies from time to time but lately I haven't seen any of them advertised.

Perhaps the best setup for your installation would be a '48 or earlier Ford V8 transmission. These aren't the strongest of the synchromesh transmissions but they are easy to find. Adaptor parts for mounting them on Olds engines are readily available and they connect to a Model A torque tube and driveshaft without alterations or special parts. Some of them have floorshift levers but others are set up for a column shift. I would recommend a column-shift box because of its better gears. However, these late-model gears can also be installed in earlier cases designed for a floor-shift lever if a '39 Ford pickup truck transmission cover and lever assembly is used. Column-shift boxes can be converted to floor-shift by installing one of the special floor-shift kits available from speed equipment shops.

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Increases Receiving Range of Car Radios! Easy to install, clearer car radio reception in the city, or on the road. Both 6 and 12 volt models. Almost doubles the range of car radios. Brings in favorite programs every time. Easily installed in 5 minutes. No. 686 —Each POSTPAID $5.00

CHROME PLATED RIPPLED GENERATOR COVERS

Add the sparkling beauty of rippled chrome to dress up your engine.

Easily installed without removing generator from the engine.

Cautious light says stops every angle to sparkle with a sweet-like brilliance that makes it a real classy addition to any engine. Made of heavy gauge steel.

Catches light says from every angle to sparkle with a sweet-like brilliance that makes it a real classy addition to any engine. Made of heavy gauge steel. For the following cars:

40-61 Buick	40-61 Chev.
40-61 Cad.	40-61 Ford
	40-60 Merc.

Specify Make, Year, and Model of car, and whether with or without power steering when ordering.
No. 631—Each ..... POSTPAID $2.25

KANDY APPLE SPRAY PAINT

How two-coat lacquer paint that gives you the most brilliant, glamorous and beautiful Finish you've ever seen! There's nothing like Kandy Apple!

Kandy Apple is the sensational new lacquer paint that has been used on custom show cars throughout the country. This new low pressure soft mist spray gives professional beautiful results. Can be used on all metal or wood surfaces—even on dashes, window moldings, motorcycles, wheels, etc. Choose from 7 distinctive tones, of which Gold is the most popular. All other colors are to be used as top coat over Gold undercoat. Create your own exclusive combination. 16-oz. aerosol can.

Top Coat Color	Stk. No.
Red	395A
Tangerine	395 I
Green	395B
Clear	395 J
Blue	395C
Purple	395 K
Burgundy	395D
Gold Undercoat	395 H

All numbers, per can ..... POSTPAID $2.00

SHAGGY REAR DECK MAT

- Beautifully customizes car interior.
- Protects rear deck from scratches, buckling due to sun rays.
- Fits all cars.

Luxurious hi-pile top quality, woven viscose faced mat with non-skid latex back in choice of white, pink or black. Large enough to fit the widest rear shelf—can be easily trimmed to exact fit with scissors if necessary. Can be easily washed when soiled.

No. 3264 A	—White	POSTPAID
No. 3264 C	—Pink	$5.25
No. 3264 E	—Black	Each

Sheepskin Material. Same material as described above—can be used for steering wheel covers, seats, door panels, etc. 36" wide. POSTPAID

No. 555 A—White	Per Yd.	
No. 555 B—Pink		$7.25
No. 555 C—Black		

Brand-New Car Plaques

High Eye Catching Design—For the Individual Car Owner.

Plaques have ground raised letters and design, leatherette-like background and "bezel" on and bonderized enamel. Made of heavy gauge aluminum—Lustrous Finish. Large size 5"x8". Can be mounted in a jiffy.

No. 329-F — No. 329-G
329-H — 329-I
329-J — 329-K
All Nos. Each $2.98

SNAPON Stainless Steel DOOR EDGE MOULDING FITS ALL CAR DOORS

- Protects door edge from chipping and rusting.
- Adds beauty to the car.
- Easy to install — snap in place, no tools needed—won't come off.

Made from highly polished, rustproof stainless steel.

Sold in pairs, enough for two door edges.
No. 668—Per Pair POSTPAID $1.25

WINDOW ANTI-RATTLER

- Stops all annoying window vibration and rattles.
- Fits most cars—clips on between sill and glass.

Handy, useful window anti-rattler that consists of rubber roller fitted to tempered spring — exerts a strong, even pressure against window. Stops vibration and rattling. Stainless steel spring, gray enameled base that will not chip or scratch finish. Sold in pairs.
No. 231 Per Pair POSTPAID 70c

KRAZY DECALS

Two unusual, colorful, humorous decals that will catch every eye. Printed in yellow, red and black. Can be placed on hood, trunk, fenders, doors or any suitable spot on car. Each large decal is complete with two matching smaller decals for dash or window use and will not fade, chip or peel. Easily applied to any surface.

Lone Wolf, 8½" wide x 11" high.		
No. 322	Each	POSTPAID 1.00
Krazy Rat Rat, 8" wide x 9½" high.		
No. 323	Each	POSTPAID 1.00

Sensational Discovery

Chrome-Like Finish

Before — After

An Amazing New Discovery Gives a Brilliant, Reflective Chrome-Like Finish.

Now, for the first time, a non-chrome material has been developed that makes it possible to have shabby chrome on the car or spend a fortune for new material and even then be disappointed. With Chrome-Like Finish these parts can be refinished in the home in minutes. This is not a paint—nor a cleaner. Each kit contains all the necessary material and easy to follow instructions.
No. 106—POSTPAID, Kit $4.95

Twinkle Glitter Spray on ALUMINUM FLAKE

For use with lacquer and acrylic paint.

- Adds more sparkle to your car than ever or existed before!
- Can be mixed and sprayed with any lacquer and acrylic.
- Choose from 5 brilliant colors.
- Ideal for custom paint jobs—for a unique sparkling finish on any car.

Twinkle Glitter is aluminum foil cut into perfect tiny squares. When mixed and sprayed with any lacquer or acrylic, it lies flat and reflects every ray of light for a sparkling effect that can't be duplicated. Each of the 5 colors is available in ½-lb. or 1-lb. size. Complete with easy-to-follow instructions.

Color	½-Lb. Stk. No.	Each	1-Lb. Stk. No.	Each
Silver	3314 A	$5.50	3324 A	10.00
Gold	3315		3325	
Red	3316	POSTPAID	3326	POSTPAID
Green	3317		3327	
Blue	3318		3328	

FRAME JACK

Lifts from the Frame, Eliminates Danger of Bending Frame

Capacity 1000 lbs.

Extremely Needed for Late Model cars. Can be used for all cars. Ideal for cars with Extra Heavy Frames.

Safest and easiest operating jack. Twin base for safer, solid support and easier lifting. Saddle type lift head fits snugly against any frame or axle—requires only a fraction of lift height necessary for removing tire, or working on car. Length 30"—height (closed) 9"—height (raised) 18"—Complete with handle. Each $6.95

PAY LESS THAN EVER for a Star Fire CAP SPINNER

Beautifies the Car the Easy Way. Dresses up the hub to make your car that custom look. Heavily chrome plated on stamped steel. Easily attached over present hub cap. Can be used as an all hub caps.
No. 813—Each ..... Postpaid $1.79

Add Sparkling Beauty to Any Engine with

Chromed Steel Coil Covers

With Built-In Ventilating Bracket

PLAIN DESIGN RIPPLED DESIGN

Easily installed in seconds—clip over any standard size coil.

Plain Design—Makes a coil look like a custom chromed job—adds eye-catching appeal to any engine. Fits on coil perfectly.
No. 829 ..... POSTPAID $2.00

Rippled Design—Sparkles like jewels reflect light from all angles for a dazzling effect. Perform a functional job too—help dissipate the heat from the coil, increasing its life. Keeps coil functioning efficiently for full power and gas. Fit perfectly.
No. 830 Each ..... Postpaid $2.25

BLACK OR WHITE

FULL WIDTH FLAPS

For Station Wagons — For All Cars

Easily Installed

Dust, dirt, and exhaust fumes out of car interior when rear window is open.

- Protects clothing from soiling spray.
- Keeps dust and dirt off of rear window.
- Protects tailgate from damage due to stones, tar, mud, etc. when in open position.
- Snow, frost and moisture cannot collect on inside of tailgate.

Heavy full width flaps can be easily installed on any station wagon or car. Helps break up the vacuum that is created at the rear of car when moving. Flaps can be installed to the frame of any station wagon or sedan. Made of top quality rubber, complete with fittings for easy installation, beautifies and protects.
No. 864 A —Black, Each $3.95
No. 864 B —White, Each 4.95

Complete—Ready to Install Convertible Rear Windows

- Window made of tough, flexible, crystal-clear plastic.
- Folds down with top.

Complete window assembly—ready to install with needed new tracks from tops and heavy duty zipper. Perfect for replacing broken, torn or discolored rear windows. Complete with easy-to-follow installation instructions which show step-by-step procedure. Window approved for use in all 50 states.

IMPORTANT: HOW TO ORDER—Each window is made for the specific car make, year and model listed. Dress up your car by following information when ordering. Car Make, Year and Model; Number Color: Black, White or Tan. Whether Project Top is Fabric or Vinyl. Windows are available for all American-Canadian-Foreign cars.
No. 815—Vinyl Plastic Each $12.95
No. 816—Fabric Each 17.95

Chrome Plated Wire Looms

With or Without New Red Spark Plug Cables.

FOR OHV ENGINES — FOR FLATHEAD ENGINES

These beautifully designed chrome plated tubular steel wire looms custom engineered to each make of motor add the final touch of beauty. Practical as well as beautiful, they are designed to keep spark plug cables away from engine heat. Complete with engine-enhancing red spark plug cables, or less cables.

	With Cables No.	Per Set	Less Cables No.	Per Set
CHEVROLET 6 37-53 All 54-57 exc. Corvair	580A	$4.39	581A	$2.67
CHEVROLET V8 55-59 exc 348 eng. 60-61 exc 348 eng 58-348 eng	580C	9.98	581C	5.99
	580D	10.98		
	580E	10.98	581D	5.98
DODGE 6 35-61 All	580A	4.39	581A	2.67
FORD V8 52-59 All	580A	4.39	581A	2.67
FORD V8 32-48 All 49-53 All 54-61 exc 58-60 Inter. eng.	580C	8.98	581E	3.71
	580G	9.98	581F	3.71
	580H	9.50	581G	5.99
OLDSMOBILE V8 49-58 All	580J	10.88	581H	5.36
PLYMOUTH 6 35-61 All	580A	4.39	581J	3.71
	580A	4.39	581A	2.67

CHROME PLATED — SOLID STEEL GEAR SHIFT BALLS

- Fits floor stick and column shift gears on all cars (except Corvette).
- Fits the gear of the knob for that smooth comfortable grip.
- 1¼" diameter . . . weighs 10 oz.
- Thread style assortment to give your car that finishing touch in customizing.

Gear shift balls are drilled and tumplated (with bushings to fit any car (except Corvette).
No. 316 Each ..... POSTPAID $1.49

The PREMIUM Safety Belt

- Standard Aircraft type Polished Buckle.
- 2 inch Nylon Webbing.
- Positive Grip Buckle Holds Securely—Releases Quickly.
- Available in Blue, Green, Gray, Maroon, Black and White. Specify color.

No. 779—Each $4.95

METAL-TO-METAL BUCKLE

SAFETY BELT

Like above safety belt, except with exclusive buckle design that insures positive instant engagement—release. Specify Blue, Green, Maroon, or Black.
No. 780—Each $7.95

PLASTIC STEEL 80% STEEL—20% PLASTIC

APPLIES LIKE PUTTY—HARDENS LIKE STEEL

ADHERES TO ALL METALS AND GLASS. Can be worked like steel—saw, grind, etc. Repairs breaks, cracks, holes, etc.

A new material with unlimited uses. Can be used in recovering, remodeling or customizing. Apply like putty with any flat item and allow to harden. Can be worked like steel—grind, cut, drill, tap, etc. Can also be used as a bonding agent between two surfaces.

Each kit contains ample material for many uses—full instructions included.
No. 910—Per Kit POSTPAID $2.25

Sparkling CHROME PLATED — Dress Up Your Engine with These Beautiful Chrome Plated

DISTRIBUTOR CAPS For All V-8 & 6 Cyl. Cars

Replace original equipment caps perfectly. Not only add beauty to your engine, it has the added advantage of sustained construction so it outlasts original equipment caps. Molded of hi-dielectric fine textured, practically non-breakable bakelite with top quality chrome plating.

Make, Year and Model of Car when ordering.
No. 868—Each POSTPAID $4.95

'Blue Dot' Lenses for 57-61 Chev. & 55-61 Ford

1961 FORD

1957 CHEV. 1958 CHEV. 1959 CHEV.

1955 FORD 1956 FORD 1957 FORD 49-61 CHEV.

1958 FORD 1959 FORD 1960 FORD

Ruby red lenses with a blue dot in the center that reflects a unit blue light.

Your tail lamps will have a new glow that makes your car stand out from the others. Ruby red lenses have blue lens with chrome trim surrounding it mounted in center. Easily installed—just remove old tail lamp lens, screw on the new unit and you're ready to go. No cutting, no drilling or alterations required—lenses are custom fit for the following cars.

Yr. Model	Stk. No. Ea. Car	Yr. Model	Stk. No. Ea. Car
CHEVROLET		FORD	
1957 All	710A 2.25	1955 All	715A 2.25
1958 All	710B 2.25	1956 All	715B 2.25
1959 H.T.	710C 2.75	1957 C	715C 2.25
1959 Sed.	710D 2.25	1958 All	715D 2.25
60-61 All	710E 2.75	1959 All	715E 2.25
		1960 All	715F 2.75
All Nos.	POSTPAID	1961 All	715G 2.75

Car Club Jackets

CHOICE OF FIVE DESIGNS

Indicate your sport is hot rods, speed cars, boats, motorcycles or chess, here is a rocket that fits any pocketbook or club treasury. It's a satinette, high quality coat that is colorfully reflected from the Grand Dan Rover sportswear satinette supplied in popular wind-breaker styling. Has quilt lined features like knit cuffs, waist pockets, easy-sliding zipper front, comfortable collar, roomy sleeves and is treated with DuPont "Arridon" to make it water and soil repellent.

This classic jacket is available in any of 5 designs: "NO CLUB—LONE WOLF" "HAVE GOGGLES—Will Travel" "ROAD DEVILS" "NIGHT PROWLERS" or "CAM BUSTERS" which are permanently silk-screened on back of jacket and then flocked for a velvet-like effect. Choice of 5 colors: Black, Red, Blue, Green, Gold. Specify design and color when ordering.

Sizes: Small, Medium, Large or Extra Large. When ordering, be sure to specify jacket color, size and emblem desired.
No. 592—Each $6.95

No More "Dead" Batteries for the Life of Your Car

Just 3-oz. gives you a Lifetime car battery

VX-6 Battery Additive

- All-weather starting.
- 33⅓% stronger lights.
- Increased battery output.
- Life of car guaranteed.

VX-6 insures constant starting under any weather conditions, anywhere in the world. Dissolves sulphation in old batteries, prevents it from forming for the life of your car in both old and new batteries. Best-selling battery additive in America!
No. 857—Each POSTPAID $2.25

REPAIR and RESTYLE with Fiberglass CUSTOMIZING KITS and ACCESSORIES

- Repair dents & holes in Make Caddies Fins
- Make Headlight Eyebrows Air Scoops
- Decharming—Pull Hose & Build Hard Tops.

Do-It-Yourself Kit ..... Full instruction book included with each kit. No leading, no welding, no soldering, no special tools needed. Fiberglass is acid-proof, will not rot, is completely waterproof. Will not rust, rot, or deteriorate. Will not peel. Easily repaired if damaged. Works perfectly with metal as it doesn't shrink. Kit contains 25 sq. ft. of cloth, 11-oz. resin epoxy, 3-oz. hardener, and 2 tops of Fiberglas.
No. 32—
Per Kit $9.95

FIX-IT KIT — Covers 3 Square Feet. For car repairs, customizing. Real useful item to have in home for repairing gutters, water tanks, etc. Contains ½ lb. Fiberglas, ½'s oz. Resin Epoxy, ½'s oz. Hardener, bag of Flox.
No. 19—POSTPAID $3.78

FRONT SHOCK ABSORBER HELPER SPRINGS

Fit right over your present front suspension type shock absorbers for POSITIVE CONTROL OF STEERING and GREATER CAR STABILITY

ELIMINATES bottoming, front end drive, sag and sway.

IMPROVES ride comfort, safety and cornering.

INCREASES the life of the tires . . . keeps front end more level and wheel alignment to original specifications.

ADDS extra strength and lift to sagging front ends.

EASY TO INSTALL, no special tools required. For the front of the following cars, equipped with good shock absorbers. Can also be installed over replacement type shock absorbers. Set of 2 coils, ready to install, nothing else to buy.

54-57 Buick		55-56 Dodge	55-56 Plym.
58-60 Buick		57-60 All	57-60 Plym.
50-61 Cad.		49-61 Ford	50-60 Stude
exc. Mod 75)		exc. T-bird)	(Not for Packard-Studebaker Trucks)
49-57 Chev		49-54 Linc.	
58-61 Chev		55-61 Merc.	½-T Pu
55-56 Chrys		41-51 Nash	½-T Pu
55-56 DeSoto		1955 Olds	57-61 Chev.
		57-61 Olds	½-T Pu
		51-58 Pont.	

No. 428
Per Pair ..... POSTPAID $8.50

CAR PLAQUES and Matching Jacket Emblems

Accessories — Buick Riders — Corvettes

Hot Heads — Nomads — Crusaders

Outlaws — Rebels — Road Runners

Vampires — Vampettes — Windjammers

Choice of 10 New and Different Designs. Specify Name of Plaque and Emblem.

If you are proud of your club, here are club plaques and jacket emblems that will reflect your pride. Dress up car—dress up your jacket with these new plaques and emblems. Hand-crafted of heavy gauge aluminum, these car plaques and jacket emblems read stand-outs. Plaques are of heavy gauge aluminum (9½"x5½") extra-large size). They have raised, polished lettering design, and polished laminated copper, with metallic finish background. Jacket emblems are of identical design in plastic and are available in felt or satin with tinted colors. All emblems have 3-color raised blue and black design on white background.

Specify Plaque or Emblem—Not Both. Specify Plaques—No. 668—Each $4.95
Felt Emblems—No. 667—Each 1.99
Satin Emblems—No. 667—Each 1.99

"Gold Medallion" Emblem FRONT & REAR FLOOR MATS

For Front & Rear All 57-61 Cars

EXTRA THICK — CHOICE OF 5 COLORS

New, Extra Beautiful Rubber Floor Mats—make any car interior "look like a million".

New Brilliant Colors Plus Shine of diameter Gold Mylar Medallion insert (gold foil under plastic)—Extra heavy ribbed design retains dirt (dirty sparkle) make these mats a real standout. A New Floor Mat that does more for the car interior than any accessory. Look at all the superior features.

- Tunnel Cover
- Skid-Proof Both
- Door-to-Door Coverage
- Smart Rib Design
- Reinforced Heel Pad
- Easier to Clean
- Thick, Heavy-Duty, Live Rubber
- Long Wearing Nap
- Tarnish-Proof 2" Diameter Gold Mylar Medallion.

- Choice of Eight Ivory Luxurious Colors
- Extra Wide Design Carries Dirt and Water. Keeps Expensive Floor Mats Clean and Dry
- Adds Extra Life, Reduces Costly Replacements.

Choice of White, Black, Red, Green, Blue, Turquoise, Gray or Cordovan. State Color Desired for All 57-61 Cars. Specify Make Year and Model of Car When Ordering.
No. 388—FRONT. Each $8.50
No. 389—REAR MATCHING MAT. Each 3.50

TRUNK WEATHERSTRIP

FITS ALL TRUNKS—ALL CARS

Seals out rain, moisture and dust. Keeps trunk interiors dry and clean. Stops vibration and rattle of trunk lids. Easy to install. Made of specially moulded sponge rubber—provides the perfect seal between body and trunk lid. 12½ ft. length (enough for any trunk) plus tube of special cement.
No. 734—Each —Postpaid $4.00

Quick Change Helper Spring

250 lb. Capacity

For All Cars With Leaf Type Rear Springs.

Easily and quickly installed or removed. As easy as changing a tire.

- EXTRA BUOYANCY — Spring action increases with load.

EXTRA Strength and EXTRA SAFETY — Perfect spring holds cold for heavy aluminum base. Carry heavier loads in your car. Prevents springs from sagging. Fits low or breaking. Prevents tailpipe and bumper from scraping when driving up or down steep inclines. Prevents car from bottoming. Ideal for Vacations, Hunting or Fishing Trips.
No. 813 —Per PAIR $9.95

Cattle Caller Horn

Moos Like a COW! BELLOWS Like a BULL!

A new sound sensation! Operation as audio frequency Control mounted on steering column permits variation of tone from the low moo of a cow to a full bellow of a bull. Ideal for use at cattle auctions and those who want a different sounding horn. Each unit supplied complete with switch. For either 6 volt or 12 volt systems.
No. 628—6 Volt Each $14.87
No. 629—12 Volt Each $15.45

Dashboard Ditties Decals

Stick Shift — Engine Room — Ejection Seat — Hydromatic — Peep Hole — Incinerator — Tuxton Safety Belts — No Smoking Please!

Small decals, imprinted with laugh-getting quotations that can be placed on mirrors, windows, bumpers, etc. 8½"x12" sheet holds eleven decals of various sizes and shapes—each of them tested for obtaining a hearty chuckle. Will not fade, chip or peel. Easily applied to any clean, smooth surface by...keeps it.
No. 290 —Per Sheet POSTPAID 1.00

FENDER GUIDES for 60-61 CHEVROLET

60 CHEV. 21½" Long 21½" High

61 CHEV. 21½" Long 21½" High

- Mask needed for long aid — saddles driver to easily see end of fender for proper placement of 60-61 Chevrolet.
- Aids in parking, making sharp turns in close quarters.

Gleaming chrome plated fender guides prevent marred or crumpled front fenders. Complete with template and hardware. Easy to install.
Pair.
No. 843—For 1960 Chev. Per Pair $3.75
No. 842—For 1961 Chev. Per Pair

100 Candle Power Flashing WARNING LIGHT

- 360° portable flashing light with 100 candle power bulb.
- Puts out 60 flashes per minute—can be seen up to 3 miles under ideal conditions.
- Choice of magnetic base or permanent roof mounting.

Perfect warning light for unmarked police cars, volunteer firemen, civil defense, emergency vehicles, etc. Completely self-contained—weatherproof—with clamp ring for easy replacement of bulb. Can be mounted on roof or dash of car. Precision Fresnal dome lens is 6" high—available in choice of red, blue or amber. Chrome plated skirt is 2" high. 5' in cable. Flashes can be seen up to a distance of 3 miles under ideal conditions. Choice of colloid lenses: Red, Blue, or Amber. Available for 6 or 12 volt systems. Specify the exact voltage desired when ordering.

Mounting Base—shipped from our Illinois warehouse. Payment for item must be made in full in order to facilitate handling. Our usual 100% satisfaction or money back guarantee applies.

Magnetic Base Warning Light. Can be mounted in any flat or slightly rounded steel surface—withstands 95 MPH speeds. With cord, plug that fits into cigarette lighter socket.
No. 632—Each $14.95

Permanent Roof Mount Warning Light—complete with easy-to-follow instructions.
No. 633—Each $14.95

Red Neoprene DELUXE SPARK PLUG CABLE SETS

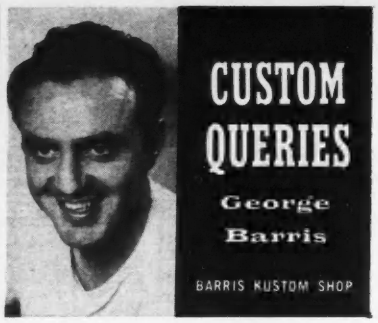
FOR ALL CARS

One-Piece Molded Neoprene Spark Plug Terminals—Completely Seal Out Moisture

- Neoprene covered cables for long trouble-free service. Waterproof—dustproof.
- Resists oil and gas, heat and cold.
- Choice of color for unusual custom-appeal. Easier, quicker, sure starts in any kind of weather—hot, cold, wet or dry. Because these new neoprene silvered spark plug and coil cables. All spark plug wires have molded neoprene covered wires and terminals molded to the cable—keeps moisture out, keeps the sparks in. Cables are complete for each car, containing six or eight spark plug cables, coil wire and protective rubber terminals. Easy to install.

	Stk. No.	Set
All 6 Cyl. (exc. Chev.)	777A	$3.75
All 6 Cyl. Chevrolet	777B	3.35
All 8 Cyl. Cars thru 1957 exc. Chrysler Product Cars	777C	3.35
8 Cyl. Chrysler, DeSoto, Dodge and Plymouth	777D	3.35
58-61 Buick, Cad., Ford V8, Merc. Edsel, Rambler V8 & Stude V8	777D	3.35
59-61 Chevrolet V8	777E	3.35

Send Your Order Now to JC WHITNEY & CO 1917-19 (C-210) Archer Ave., Chicago 16, Ill.



FEMININE CUSTOMIZERS

Dear George:

My roommate and I both have Corvettes, a '56 and a '57. We read your column each month and are learning more about customizing as we follow your suggestions. We are planning on customizing our Corvettes and have hopes of doing this ourselves in my father's shop. The '56 has red disc hubcaps and I would like to know what grille would fit in my car and would adapt to Color Chrome easily. How about skirts and can we order them or do they have to be custom made? Would dual spotlights look too big and conspicuous on a Corvette? Please give us some all-around general advice in easy customizing that we could do and also a color combination for each car.

— Karen Slater & Judy Fletcher
Salem, Oregon

A floating tube grille mounted in your grille cavities would look good. Their chrome should take Kolor Krome very nicely. On the skirts, I would say no, they haven't a place on your cars. The new small sized dummy spots available through Calif. Custom Accessories look great, 1807 W. 65th Street, Los Angeles, Calif., investigate these. I'd put '59 Cad taillights in one Corvette, and '56 De Soto lenses in the other. As for colors, a Candy Red body with white pearl body impressions in one and white pearl body with red candy impression on the other would come on real sharp.

MERC RESTYLING

Dear George:

I have a '53 Merc and would like to customize it. Would it be difficult to install '58 De Soto taillights? How about a two inch drop at rear, a three inch drop up front? Would it be hard to put a 60 Corvette mill in my car? How would I put a floor shift in my car? What would be best to paint it, Bahama Blue or Black?

— Bill Carleton
Albuquerque, N. M.

Filler panels will cover your old cavity, then you can install new lights. Your rake would be quite a bit with three inches. Engine mounts, adaptor plate and other modifications will be necessary to adapt a Corvette to your Merc. Cal Automotive, 6868 Farmdale Ave., North Hollywood, Calif., has an excellent floorshift conversion kit out, called the "Eliminator," which comes with instructions. It's real easy to install, gives a fast shift. Bahama blue in lacquer is the route to go.

CUSTOM '39 CHEV

Dear George:

I'm planning on customizing my '39 Chev coupe and have definite ideas on some features but a few have me puzzled. First what can I do with the grille? And what can I do with the dash to dress it up a bit without using a torch?

— Don Butterfield Jr.
Caribou, Maine

For the grille I would suggest a '40 Nash die cast grille. It has bolt hole mountings on the sides and can be made to fit the contour of your front end easily. For the horizontal air vents in the front fenders I would install the vertical grilles from a '59 Edsel. Have the dash pleated and covered with naugahyde.

'34 CHEV FORDOR

Dear George:

I am purchasing a '34 Chev 4-door sedan and would like some styling tips on fixing it up. I wish to retain the fenders but I would like to rake it. How would I go about this? How about wheels? Is there a different grille that will look better without too much metal work? Any help you can give will be appreciated.

— Dave Rinehart
Temple Hills, Md.

You can lower your Chev by D-arching the springs. Reversed wheels will look real sharp. This is done by knocking out the rivets, reversing the outer rims, aligning and re-riveting the hubs and rims. Chromed expanded metal over the mesh in your grille would be an improvement. Try a pair of the ever popular '48 Pontiac taillights, they should look real jazzy.

PICKUP GRILLES

Dear George:

I recently purchased a '56 Ford pickup and immediate plans include some customizing, therefore I could use your help. First what type grille will fit and look nice without too much body work? What headlights will look sharp? How can I lower the front a few inches and still retain a smooth ride?

— Jim Williams
Fresno, Calif.

Install a '57 Chevy pickup grille in a canted manner to go along with a set of '57 Imperial headlights likewise canted. You can lower your front end with a dago axle. Reversing the spring eyes will give you a bit of drop, too, without affecing your ride.

COMING EVENTS

NHRA DRAG SCHEDULES

Gadsden, Ala. — Green Valley Drag Strip; Every Sat. night — May thru Sept.

Phoenix, Ariz. — Phoenix Drag Strip. Litchfield Rd. & Grand Ave. El Mirage, Every Sat. nite.

Carlisle, Ark. — Carlisle Drag Strip. 31 miles east of Little Rock, 2nd Sun.

Eureka, Calif. — Samoa Airport, Eureka 9/10; 10/1.

Holtville, Calif. — Holtville Auxiliary Landing Field, 2nd Sun. ea. mo.

Inyokern, Calif. — Inyokern Airport, Reopen Sept.

Madera, Calif. — Madera Airport, 2nd Sun. ea. mo.

Long Beach, Calif. — Lions Associated Drag Strip — Every Sat. Night

Oroville, Calif. — Oroville Airport, 2nd & 4th Sun. ea. mo.

Pomona, Calif. — Pomona Drags, Los Angeles Co. Fairgrounds, every Sun.

Redding, Calif. — Redding Municipal Airport, 3rd Sun. ea. mo.

Riverside, Calif. — Riverside Raceway, 1 mi. So. of Junction US 60 & 395, 4th Sun.

San Luis Obispo, Calif. — "Pride of the Pacific Drag Strip," San Luis Airport, 4th Sun. ea. mo.

Santa Maria, Calif. — Santa Maria Dragons, 2nd Sun. ea. mo.

Visalia, Calif. — Visalia Airport, 4th Sun. ea. mo. thru Oct.

Castle Rock, Colo. — Continental Divide Raceway, 25 mi. So. of Denver 9/10; 10/8

Colorado Springs, Colo. — Pikes Peak Timing Ass'n, 9/1, 15

Grand Junction, Colo. — Midway Drag Strip, Grand Junction, Colo., Airport 9/3, 17

Julesburg, Colo. — Platte Valley Dragstrip, 2 miles West of Julesburg, 4th Sun.

East Haddam, Conn. — Conn. Dragway, off Route 16 from Colchester Center every Sun.

Davie, Fla. — Davie Drags, 10 mi. West Ft. Lauderdale, 2nd & 4th Sun. ea. mo.

Daytona Beach, Fla. — Spruce Creek Dragstrip — Southwest of City, 2nd & 4th Sun. ea. mo.

Green Cove Springs, Fla. — Thunderbolt Raceway — 10 mi. No. Green Cove on US Hwy. 17, 1st & 3rd Sun.

Miami (Hialeah), Fla. — Amelia Earhart Field, 1st & 3rd Sun. ea. mo.

Covington, Ga. — Newton County Dragstrip, 2nd & 4th Sun. ea. mo.

Pocatello, Idaho — Hwy. 30 West, 9/3, 17; 10/1, 15

Alton, Ill. — Alton Dragway — 1 mi. off Route 140 on Fosterburg Road, every Sun.

Muncie, Ind. — Muncie Dragway, 4 mi. NE of Muncie, on State Rt. 67, every Sun.

Coffeyville, Kansas — Coffey Grinders Drag Strip, 1st & 3rd Sun.

Sturgis, Ky. — Sturgis Drag Strip, 1 mi. So. of Sturgis at Airport, 9/17; 10/1, 15.

Hammond, La. — Hammond Airport, 4th Sun. ea. mo.

Houma, La. — 1st & 3rd Sun. ea. mo.

Sanford, Maine — Sanford Airport, 2nd & 4th Sun. ea. mo.

Orange, Mass. — Orange Municipal Airport 3rd Sun. thru Oct.

Detroit, Mich. — Detroit Dragway, Six-Toledo Hwy. & Sibley Rd., Every Sun.

Minneapolis-St. Paul, Minn. — Minneapolis Dragway, 3 miles east of Anoka on Hwy. 242, every Sun. & holiday thru Oct.

Lincoln, Neb. — Shaundos Drag Strip, Lincoln Air Force Base, west of Lincoln, 10/8

Omaha, Neb. — Omaha Dragway, 9/17; 10/1

Scottsbluff, Neb. — 9/3, 23, 24.

Grand Island, Neb. — Grand Island Jaycee Dragstrip, 2 mi. east on Hwy. 30 & 1½ mi. No. of Grand Island, 9/10

Silver Springs, Nev. — Int. Hwy. 50 & 95A, Reno, Last Sun. each mo.

Atco, N.J. — Atco Dragway, Wed. night thru Sept.

Great Meadows, N.J. — Island Dragway, on Route 46, Ev. Sun.

Vineland, N.J. — Vineland Speedway, Every Sat. night

Hobbs, N. M. — Charioteers Dragway, Hobbs AFB, 1st Sun. ea. mo.

Roswell, N. M. — Walker AFB, 3rd Sun. thru Oct.

Cicero, N. Y. — Esta Safety Park, Eastwood Rd. Cicero & Bridgeport, ev. Sun.

Niagara Falls, N.Y. — Niagara Raceway Park, Tuscarara Road off Lockport Rd., Ev. Sun.

Cincinnati, Ohio — Beechmont Dragway Rts. 74 & 125 off Beechmont levee every Sun.

Thompson, Ohio — Thompson Dragstrip, SE of Painesville on State Rt. 528, Every Sat. & Sun.

West Salem, Ohio — Dragway 42, 25 mi. SW of Akron on State Rt. 42, 3 mi. off Interstate 71, every Sun.

Oklahoma City, Okla. — Jaycee Dragway, Oklahoma State Fairgrounds, Every Sun.

Tulsa, Okla. — Tulsa North Airport, 9/10, 24

McMinnville, Ore. — Columbia Timing Ass'n. 9/10, 16, 17, 10/1

Bedminister, Pa. — Vargo's Dragway, Bedminister Township, Bucks Co. Every Sun. thru Oct.

York, Pa. — US 30 DRAG-O-WAY, 6 mi. west of York on US 30, Every Sat. Nite.

Charlestown, R.I.—7 mi. SE of Westerly on Rt. 1 10/1

Palmetto, S.C. — Palmetto Raceway, 13 mi. So. of Columbia Airport, Columbia, S.C. A.M. & P.M. 9/7; 10/3

Halls, Tenn. — 1st & 3rd Sun. ea. mo.

Memphis, Tenn. — Lake Land Dragways, 11 mi. east of Memphis on Hwy. 70, 1st & 3rd Sun.

Abilene, Texas — Abilene Dragstrip, 2 mi. So. of Tye on F.R. 707, 3rd Sun. ea. mo.

Amarillo, Texas — Amarillo Dragway, 7 mi So. on Washington Ave., 2nd & 4th Sun. ea. mo.

Caddo Mills, Texas — North Texas Timing Ass'n., Caddo Mills Airport, 1st Sun. ea. mo.

El Paso, Texas — El Paso Dragstrip, 2nd & 4th Sun. ea. mo.

Newark, Texas — T.C.M.A.A. Dragstrip, National Guard Base, 2nd & 4th Sun. ea. mo.

Wichita Falls, Texas — Red River Drag Strip, 2nd Sun. ea. mo.

Emporia, Va. — Emporia Dragstrip, Every Sun.

Lynchburg, Va. — New London Drag Strip, 15 mi. west of Lynchburg, ev. Sun. thru. Oct.

Petersburg, Va. — Eastern Dragway, 1st & 3rd Sat.

Ellensburg, Wash. — Ellensburg Airport, every two weeks

Kent, Wash. — Pacific Raceway, on Rt. 5A 9/10, 24; 10/8, 22

Cheyenne, Wyo. — Cheyenne Dragway, on US 85, 9/10

Deseronto, Ontario, Canada — Mohawk Drag Strip, 9/3, 17; 10, 15

Caguas, Puerto Rico — Antilles Auto Racing Track, 2nd & 4th Sun. ea. mo.

SHOWS

Indianapolis, Ind. — Sept. 1, 2, 3 & 4, National Champion Custom Car Show, Presented by National Hot Rod Assoc. Write for your entry blank today to Big Show, 1171 North Vermont Avenue, Los Angeles 29, California.

Topeka, Kans. — October 7, 8 Mid-America Auto Spectacular, Fairgrounds Exposition Bldg. Mid-America Shows, Inc., 1520 Westover Road.

Lincoln, Nebr. — Oct. 15; Nebr. State Fairgrounds Exh. Bldg., Lincoln Rebel's Timing Association Motor Sports Show. Lincoln Rebels, 1111 So. 22.

Glen Cove, New York. — Oct. 6-8, 4th Annual Rod & Custom Show, Glen Cove YMCA, Glen Cove Road Panthers, 31 Dosoris Lane.

Utica, New York — Nov. 10-12 Utica's Custom Car Review, Utica Memorial Auditorium, Road Aces Auto Club, P.O. Box 70, Cicero, New York.

Mansfield, Ohio — Sept. 9-10, 4th Annual Rod & Custom Show. Local Union Hall No. 711, 320 East Lieth Street. Flying Angels Auto Club.

Hanover, Penn. — Nov. 24-26, 2nd Annual Rod & Kustom Kar Show, Shultz Chevrolet Garage, 100 E. Chestnut St., Hanover Rod & Custom Club, 202 Second Avenue.

Lancaster, Pa. — March 9-11, 1962. 7th Annual Drag-O-Rama. Guernsey Sales Pavillion, US 30 East, RD1, Conestoga, Pa.

Utica, New York — Nov. 10, 11 & 12, Utica's Custom Car Review — Utica Memorial Auditorium, P. O. Box 70, Cicero, New York

San Francisco, Calif. — Nov. 21 thru 26, Annual Imported Car Show at Brooks Hall Civic Center, Hyde at Fulton

Wichita, Kansas — Sept. 30 thru Oct. 1, Rod And Custom Show, Des Moines Veterans Memorial Bldg., 803 Royal Rd.

Teaneck, N.J. — Sept. 30 thru Oct. 1, Drivin' Deuces, Inc., 4th Annual East Coast Round Up

Clifton, New Jersey — Oct. 21-22, Rod And Custom Show at Fette Ford, Bloomfield Ave. off S-3 Circle. For further information contact John Bosland, c/o Lakeland Modifiers, 90 Union Blvd., Totowa Boro, New Jersey

Paterson, New Jersey — Nov. 10 thru 12, Chauffeurs Rod And Custom Club, at the Paterson Armory

FORD **401**

The distributor is now ready for modification. This particular distributor is very easy to modify due to its design. The distributor plate assembly is removed, uncovering the mechanical advance mechanism. It is not necessary to change any weight or spring tension. The only modification will deal with the reduction of travel of the weight mechanism. This is accomplished by welding $\frac{1}{16}$ of an inch to the outside edge of the weight control slot. This can be filed to achieve the exact position. (This modification is shown in the photo story). The stock curve as shown in the illustration, stops at 14 degrees, the point at which it reaches 10 degrees is where the stop should contact the weights. This allows an increased amount of initial timing to be used. The total amount of lead or timing required by these engines is 38 degrees. Having 10 degrees in the distributor, 18 degrees is used as an initial timing mark as the distributor turns one half the speed of the crankshaft. In other words, the mechanical advance of the distributor is ten degrees multiplied by two which in engine speed equals 20. 20 degrees being total mechanical advance in crankshaft degrees subtracted from the desired total advance of 38 degrees, leaving an initial timing location of 18 degrees.

The stock recommended points should be set at 30 degrees of dwell each and are capable of turning in the excess of 6000 rpm when care is taken to assure proper alignment of point faces. A soft portion of rubber can be placed behind the tension arm of the points, reducing the tendency of float and allowing the unit to operate near the 7000 rpm bracket.

After a complete double check of the distributor and component parts, it is ready to be installed in the same manner as it was removed. Keeping in mind the original rotor position.

Now that these directions and step-by-step procedures have been followed I'm sure you will experience a new revolution in performance with the first touch of the throttle. The real test is at the local drag strip. These modifications have worked well for me — if followed correctly I see no reason why they can't also send you home a winner.

THE NEW LOOK

LOG NUT COVERS

HONEST CHARLEY

CHROME NUT COVERS
FOR WHEEL LUGS
ALL CARS

No. CH-4 For All Cars Except Chev.

No. CH-5 For All Chevrolets

SOLD ONLY IN SETS
OF 10 OR MORE EACH 15c

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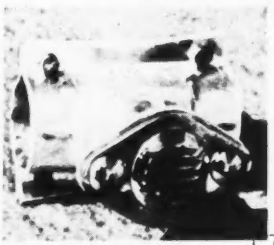
SNEAKER PLUGS

● BOLT-ON CONSTRUCTION. . .



- ALL STEEL WELDMENT
- CADMIUM PLATED
- EASILY INSTALLED
- NO WELDING
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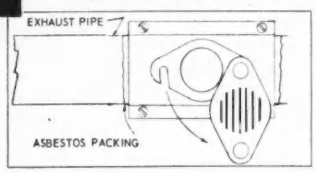

Sneaker Plugs are installed under the car to be opened for use in Stock Competition. Blocking Plate can be swivelled to open Position by Loosening Bolts. For STREET DRIVING, PLATE FORCES EXHAUST THRU MUFFLER IN NORMAL MANNER.

YOU DON'T NEED TO JOIN NO DISCOUNT CLUBS TO GET THE HONEST DISCOUNT CATALOG.

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WE CARRY THE LARGEST STOCK OF NAME SPEED PARTS EAST OF THE CALIF. BORDER

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DS-561 1961 CORVAIR DUALS

Say Steel or Glass

COMPLETE KIT

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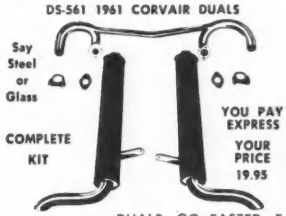
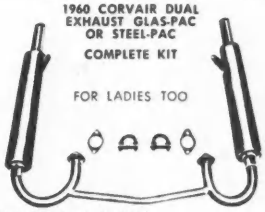


1960 CORVAIR DUAL EXHAUST GLAS-PAC OR STEEL-PAC COMPLETE KIT

FOR LADIES TOO



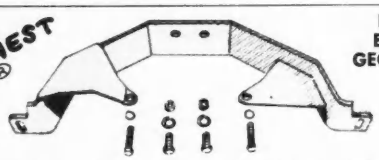
DUALS, GO FASTER, FARTHER, SMOOTHER

Eliminates (Crossover Pipe). Easily installed. Kit includes matched mufflers (Choice of Glass or Steel Packed), with welded on brackets, two clamps, two gaskets, easy instructions.

HONEST

MOTOR MOUNTS

BY BIG GEORGE



New Improved Mounts Allow Front and Rear Adjustment To Allow For Different Adaptor Spacing—Universal Design Lets, You Swap Cars Without Buying New Mounts. Through Bolt Mounting Eliminates Bonded Pad Break Worries. Makes Engine Swap A Cinch—Installs Late Model V-8 Engines Into Ford Merc.-Stude and 6 Cyl. Chevrolet Frames.

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ENGINE	FRAME	PART NO.	PRICE
Buick To 28-34 Ford		B202A28	16.95
Buick To 35-40 Ford & Merc.		BU202SP150	16.95
Buick To 41-48 Ford & Merc.		B202	12.95
Buick To 49-53 Ford & Merc.		B202A49	16.95
Cad To 28-34 Ford		CA202A28	16.95
Cad To 35-40 Ford & Merc.		CA202SP150	15.35
Cad To 41-48 Ford & Merc.		CA202	12.95
Cad To 49-53 Ford & Merc.		CA202A49	16.95
Chry. To 28-34 Ford		CR202A28	16.95
Chry. To 35-40 Ford & Merc.		CR202SP150	15.35
Chry. To 41-48 Ford & Merc.		CR202	12.95
Chry. To 49-53 Ford & Merc.		CR202A49	16.95
Chev. To 28-34 Ford		CV202A28	16.95
Chev. To 35-40 Ford & Merc.		CV202SP150	15.35
Chev. To 41-48 Ford & Merc.		CV202	12.95
Chev. To 49-53 Ford & Merc.		CV202A49	16.95
OHV Ford-Merc.- T Bird Engines Except Listed Below As F-M		332 & Up	
F-M To 28-34 Ford		FM202A28	16.95
F-M To 35-40 Ford & Merc.		FM202SP150	15.35
F-M To 41-48 Ford & Merc.		FM202	12.95
F-M To 49-53 Ford & Merc.		FM202A49	16.95

ENGINE	FRAME	PART NO.	PRICE
Olds To 28-34 Ford		OL202A28	16.95
Olds To 35-40 Ford & Merc.		OL202SP150	15.35
Olds To 41-48 Fords & Merc.		OL202	12.95
Olds To 49-53 Ford & Merc.		OL202A49	16.95
Pontiac To 28-34 Ford		PO202A28	16.95
Pontiac To 35-40 Ford & Merc.		PO202SP150	15.35
Pontiac To 41-48 Ford & Merc.		PO202	12.95
Pontiac To 49-53 Ford & Merc.		PO202A49	16.95
Chev. To 53-57 Studebaker		CV55357	12.95
Chev. To 29-32 Chev. B		CV202AC29	16.95
Chev. To 40-48 Chev. B		CV202AC40	16.95
Chev. To 49-54 Chev. B		CV202AC50	16.95

IMPORTANT: If Closed Drive Shaft Is Retained In 1928 To 1948 Ford Chassis - No. AD-75 Anti-Chatter Pre-Load Adjusters Are Available To Eliminate Engine Chatter.

No. AD-75 Pre-Load Adjusters — Set .84

Dropped Drag Link, Designed To Clear Pan and Starter On All OHV V-8 Engines.

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SEND 25% DEPOSIT ON C.O.D.'s. . NO C.O.D. FOR LESS THAN $5.00. ALL ITEMS MARKED PREPAID MUST BE PAID IN ADVANCE.

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All items marked prepaid must be paid in advance.

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CITY ..... Zone.... STATE .....

9-61

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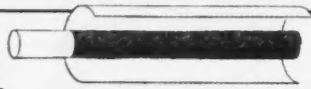

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